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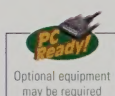
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EDC-45	Quick charger (not for FI)	83.95
EDC-49	Batt cgr; EBP-20/22/24/26/28N	23.95
EDH-11	AA alk pack; DJ-180/580/582T	10.95

ALINCO - continued

EDH-12	DC jack adapter; DJ-180/280TH	10.95
EJ-12U	Tone decode unit; DJ-FIT	51.95
EJ-14U	50 ch mem unit; DJ-180/280TH	21.95
EJ-15U	200 ch mem unit; DJ-180TH	29.95
EME-10	Headset/VOX/PTT; 160/560/580/582	71.95
EME-11	Ear/microphone w/PTT/VOX	52.95
EMS-22	Spkr/mic; 160/560/580/582	44.95
EMS-51	Speaker/mic	39.95
ESC-15	Soft case for DJ-FIT	17.95
ESC-18	Soft case; 180TH/EBP-26N	14.95
ESC-19	Soft case; 180TH/EBP-28N	18.95
EBP-30N	7.2v 700ma nicad; DJ-GIT	50.95
EBP-31N	7.2v 1200ma nicad; DJ-GIT	79.95
EBP-32N	12v 722ma nicad; DJ-GIT	95.95
EDC-52	Quick charger; DJ-GIT	119.00
EDC-55	Wall cgr; EBP30/31/32N; GIT	23.95
EDH-14	Dry cell battery case; DJ-GIT	15.95
EJ-16U	Tone squelch unit; DJ-GIT	57.95
ESC-23	Soft case for EBP-30N; DJ-GIT	16.95
ESC-24	Soft case; EBP-31N/32N; GIT	21.95
DJ-191TH	5w 2m FM HT/batt/cgr/TPP	289.95
*Sale price with \$30 instant coupon thru 11/30/98		
DJ-65TH	5w 2m/440 FM HT/EBP36N/cgr/TT	481.95
*Sale price with \$20 instant coupon thru 11/30/98		
EBC-6	Mobile bracket	16.95
EBP-33N	4.8v 650ma nicad battery	63.95
EBP-34N	4.8v 1200ma nicad battery	82.95
EBP-35N	7.2v 900ma nicad battery	97.95
EBP-36N	9.6v 650ma nicad battery	67.95
EBP-37N	4.8v 700ma nicad battery	34.95
EDC-16B	Cigarette lighter cable w/filter	22.95
EDC-36	Power cable w/filter	21.95
EDC-60	Quick charger	78.95
EDH-16	Dry cell battery case	10.95
EJ-28U	CTCSS decoder unit; DJ-191TH	42.95
EME-6	Earphone	11.95
EME-12	Headset w/earphone/mic/VOX	70.95
EME-13	Headset w/ear bud/mic/VOX	70.95
EMS-82	Remote speaker/mic	48.95
EMS-47	Spkr/mic w/volume control	24.95
EMS-51	Speaker/mic	39.95
ESC-28	Soft case for EBP-33N	10.95
ESC-29	Soft case for EBP-37N	10.95
ESC-30	Soft case for EBP-34N/35N/36N	10.95
DJ-S11T	340mw 2m FM HT/battery holder	149.95
DJ-S41T	340mw 440 FM HT/battery holder	149.95
EBC-6	Mobile bracket	16.95
EDC-78	Wall charger; (not for alkalines)	7.95
EDC-78/EBP-25N	Cgr/AA nicad bundle	14.95
EDH-18	12v to 5.5v DC/DC conv/cig plug	33.95
EME-6	Earphone	11.95
EME-13	Headset w/ear bud/mic/VOX	70.95
EME-15	Earphone/mic w/VOX	55.95
EMS-47	Spkr/mic w/volume control	24.95
EMS-51	Speaker/mic	39.95
ESC-27	Soft case	16.95
DJ-X10T	1MHz-2GHz AM/FM/MSB hand/cell bkld	559.00
EBP-33N	4.8v 650ma nicad battery	63.95
EBP-34N	4.8v 1200ma nicad battery	82.95
EBP-37N	4.8v 700ma nicad battery	34.95
EDC-16B	Cigarette lighter cable w/filter	22.95
EDC-36	Power cable w/filter	21.95
EDC-37	13.8v power cable	7.95
DR-M06TH	20w 6m FM Xcvr/TPP/encoder	351.95
*Sale price with \$20 instant coupon thru 11/30/98		
DR-140TQ	50w 2m FM Xcvr/TPP/EJ20U tone sq	290.95
*Sale price with \$30 instant coupon thru 11/30/98		
DR-150TQ	50w 2m FM Xcvr/TPP/EJ20U tone sq	327.95
*Sale price with \$20 instant coupon thru 11/30/98		
CC-150	Cloning cable for DR-150TQ	14.95
DR-430TQ	440 FM Xcvr/TPP/EJ-20U tone sq	307.95
*Sale price with \$20 instant coupon thru 11/30/98		
EJ-19U	Memory expansion unit	28.95

ALINCO - continued

EDC-20	16' separation kit; DR-600TB	46.95
EJ-8U	DTMF squelch; DR-590/592/599	47.95
DR-605TQ	2m/440 FM Xcvr/TPP/EJ24U tone sq	537.95
*Sale price with \$50 instant coupon thru 11/30/98		
DR-610TQ	50/35w 2m/440 FM/TPP/EJ24U tone sq	699.95
*Sale price with \$50 instant coupon thru 11/30/98		
EBC-8	Front control head bracket; 610TQ	16.95
EDS-1	Junc box w/ext spkr, mic jacks; 610TQ	56.95
EDS-2	3 meter ext cable; EDS-1/610TQ	23.95
EDS-3	5 meter ext cable; EDS-1/610TQ	39.95
EJ-23U	Additional memory unit; 610TQ	35.95
EJ-24U	Tone decoder unit; 605T/610T	85.95
EMS-11	Extra TTP microphone	50.95
DX-70T	Compact HF Xcvr w/6m	957.95
*Sale price with \$50 instant coupon thru 11/30/98		
DX-70TH	Comp HF Xcvr/100w 6m/mob bkt	1074.95
*Sale price with \$60 instant coupon thru 11/30/98		
DM-340MVT	30A power supply/35A surge	199.00
EBC-8	Front control head bracket	16.95
EBC-9	Mobile bracket	32.95
EDS-4	Rem mt acc kit w/5 cable, 2 covers	31.95
EDS-5	Microphone extension cable	28.95
EDS-6	15' remote cable	53.95
EDX-1	Manual antenna tuner	299.00
EDX-2	160-10m 200w automatic ant tuner	344.00
EMS-14	Desk top microphone	113.95
DX-77T	160-10m 12v base HF Xcvr	1059.95
*Sale price with \$150 instant coupon thru 11/30/98		
DM-340MVT	30A power supply/35A surge	199.00
EDS-5	Microphone extension cable	28.95
EDX-1	Manual antenna tuner	299.00
EDX-2	160-10m 200w automatic ant tuner	344.00
EMS-14	Desk top microphone	113.95
ERW-4	PC cable only for DX-77T	27.95

ALPHA DELTA (ALP)

R-T	200w 500 MHz lightning protect	\$ 36.95
Extra arc-plug cartridge; R-T		12.95
R-T/N	200w thru 1 GHz type N protector	43.95
Extra arc-plug cartridge; R-T/N		12.95
HV	2kw 500 MHz lightning protector	39.95
Extra arc-plug cartridge; HV		15.95
HV/N	2kw thru 1 GHz type N protector	46.95
Extra arc-plug cartridge; HV/N		15.95
LT	200w thru 10m T' SO-239 protector	29.95
Extra arc-plug cartridge for LT or LT/N		17.95
RT/2G	200w 500 MHz lightning protector	39.95
Extra arc-plug cartridge for RT/2G		12.95
RT-N/2G	200w thru 1 GHz type N protector	46.95
Extra arc-plug cartridge for RT-N/2G		12.95
HV/2G	2kw 500 MHz lightning protector	44.95
Extra arc-plug cartridge for HV/2G		15.95
HV-N/2G	2kw thru 1 GHz type N protector	49.95
Extra arc-plug cartridge for HV-N/2G		15.95
Delta-2	500 MHz 2-pos coax switch/protector	49.95
Delta-2/N	1.3 GHz 2-pos type N switch/protector	64.95
Delta-4	500 MHz 4-pos coax switch/protector	79.95
Delta-4/N	1.3 GHz 4-pos type N switch/protector	89.95
D-4	Extra arc-plug; Delta-2/2N/4/4N	9.95
Delta-C	Kit w/crt ins/2 end ins/static protect	29.95
SEP	Extra arc-plug cart; DX-Ultra/Delta-C	15.95
Delta-CIN	Antenna end insulator	1.95
DH-1	Hydraulically dampened 41' fold mast/base	249.95
DH-2	Hydraulically dampened 41' fold mast/no base	229.95
DX-80	80m 134' complete dipole antenna	49.95
DX-40	40m 67' complete dipole antenna	39.95
DX-20	20m 34' complete dipole antenna	39.95
DX-A	160-80-40m twin sloper antenna	59.95
DX-B	160-80-40-30m 60' sloper ant	69.95
DX-CC	80-10m 5-band 82' no trap, no tuner dipole	119.95
DX-DD	80-40m 82' Delta Dipole antenna	89.95
DX-EE	40-10m 4-band 40' no trap, no tuner dipole	99.95
DX-LB	160-80-40m 100' shortened dipole	119.95
DX-LB Plus	160/80/40/20/15/10m 100' short dip	149.95

PRICE LIST

ALPHA DELTA - continued

DX-SO 80/20m 38' short dipole	99.95
DX-SWL AM broadcast-13m 60' SWL sloper ant	79.95
DX-SWL-S 90-13m 40' SWL sloper	69.95
DX-Ultra AM broadcast-30MHz 80' SWL dipole	119.95
Outpost Base tripod mtg sys for mobile ant	199.95
SK-1 Straight Kent key	129.95
SP-1 Single paddle Kent key	139.95
TP-1 Twin paddle iambic Kent key	149.95
VRC Variable response speaker console	249.95
VRC-2 Ducted port bass reflex speaker	99.95

Also see OUTBACKER

AMECO PUBLICATIONS (AME)

4-01 Code Course Instruction Booklet	\$ 2.00
6-01 Mastering the Morse Code	3.00
12-01 General Class FCC Test Manual	9.95
17-01 Extra Class FCC Test Manual	9.95
23-01 Novice Theory Course	9.95
26-01 Advanced Class FCC Test Manual	9.95
27-01 Novice Class FCC Test Manual	9.95
28-01 Technician Class FCC Test Manual	9.95
78-01 No Code Technician FCC Test Manual	12.95
102-01 Amateur Radio Theory Course	9.95
EN-1 Novice Class Exam	2.50
PC-12-01 General FCC learning software	24.95
PC-17-01 Extra FCC learning software	24.95
PC-26-01 Advanced FCC learning software	24.95
PC-27-01 Novice FCC learning software	24.95
PC-28-01 Technician FCC learning software	24.95
PC-78-01 No Code Tech FCC learning soft	29.95

CODE COURSES - CASSETTE TAPES

100-T Junior code tape, 0-7 1/2 wpm	\$ 5.95
101-T Senior code tapes, 0-18 wpm	10.95
103-T Advanced code tape, 8-18 wpm	5.95
104-T Extra Class code tape, 20 wpm	5.95
105-QT General Class QSO code course tape	5.95
106-QT Extra Class QSO code course tape	5.95
107-PC-2 IBM Morse Code Course, version 2.0	29.95
NP-1 Novice Code & Theory Course	12.95

CODE PRACTICE OSCILLATORS & CODE KEYS

K-1 Bakelite type key	\$ 10.95
K-4 Brass type key	16.95
OCM-2X Code oscillator & CW monitor kit	19.95
OCM-2W Wired oscillator & CW monitor	24.95

PREAMPLIFIERS

TPA Tunable preamp & indoor active ant	\$ 76.95
P-9T Power supply for TPA	9.95
PT-3 2-54 MHz transceiver preamp	124.95
P-12T Power supply for PT-3	9.95

DUMMY LOADS & FILTERS

DL-1500 1500w dummy load	\$ 59.95
DL-1500F 1500w dummy load w/fan	99.95
HP-75T 75 ohm high-pass filter	12.95
HP-300T 300 ohm high-pass filter	12.95

AMERITRON (AMR)

AL-80B 1kw PEP out linear (3-5002) last minute price	1295.00 1199.95
AL-82 1.5kw PEP out linear (2-3-5002s) last minute price	2995.00 2099.95
AL-572 1.3kw PEP out linear (4 572Bs)	1395.95 1299.95
AL-800 1250w PEP out linear (3CX800A7)	1595.00 1429.95
AL-800H 1.5kw PEP out amp (2 3CX800A7)	2295.00 2049.95
AL-811 600w PEP out linear (3 811As)	649.00 599.95
AL-811H 800w PEP out linear (4 811As)	799.00 729.95
AL-1200 1.5kw PEP out linear (3CX-1200A7)	2295.00 1969.95
AL-1500 1.5kw PEP out linear (8877)	2795.00 2399.95
ALS-500M 600w PEP out solid state mob amp	799.00 699.95
ALS-600 700w PEP out solid state amp w/ps	1299.00 1129.95
ARB-7021 Amplifier Xcvr interface; Icom	39.95
ARB-70212 Amp Xcvr interface; Ico 706&MkII	39.95
ARB-702K Amplifier Xcvr interface; Kenwood	39.95
ARB-702Y Amplifier Xcvr interface; Yaesu	39.95
ATP-100 Amplifier tuning pulser	49.95
ATP-102 Deluxe amplifier tuning pulser	59.95

AMERITRON - continued

ATR-15 1.5kw PEP antenna tuner	399.00 369.95
ATR-30 3kw PEP antenna tuner	599.95 549.95
ADL-1500 1.5kw dummy load with oil	59.95
ADL-2500 2.5kw dummy load with fan	199.95
ICP-120 120v inrush protector	79.95
ICP-240 240v inrush protector	79.95
AWM-30 3kw PEP SWR/wattmeter/rem sens	149.95 139.95
QSK-5 Stand alone T/R switch	349.00 329.95
QSK-5PC PC board kit; T/R switch	249.00 229.95
CF-5 Cooling fan for QSK-5	39.95
RCS-4 4-pos wireless remote coax switch	139.00 129.95
RCS-8V 160-2m 5-pos remote coax switch	149.00 139.95
RCS-8VN 160-2m 5-pos N rem coax switch	159.00 149.95

Note: RCS-8V/VN require 8-wire control cable.

Antenna Specialists (ASP)

AP-143 2m on glass cellular look-alike ant	\$ 78.25 69.95
APR151.3 2m 3dbd on glass antenna	70.00 59.95
KAV-382 On glass replacement mtg kit	11.95

Antennas America (ANA)

HVA-146 75w 2m disguised decal antenna	\$ 69.95
HVA-460 75w 440 disguised decal antenna	69.95

Antenna Supermarket (ANT)

Eavesdropper* 60-11m trap dipole SWL ant	\$ 79.95
*Specify SO-239 or twin-lead	
SWL Sloper 120-11m SWL antenna	79.95 59.95

ARROW Antenna (ARA)

146/437-10 3 el 2m/7 el UHF handheld beam	\$ 73.95
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ARTSCI (ART)

Amateur Handbook	\$ 14.95
Lost Users Manuals	19.95
US Repeater 98 Mapbook 98/99 edition	9.95
US Repeater CD-ROM info+US hams	29.95 14.95

ASTATIC (AST)

10DA-L Dynamic mic head (no stand or cable)	\$ 69.99
D-104-L Crystal mic head (no stand or cable)	42.99
T-U69 Amplified desk stand	52.95
Night Eagle Brass/black crystal desk mic	129.99 119.95
T-U69-D104 Amp mic, 6-wire w/stand	99.99
T-U69-D104-SE Silver Eagle 6-wire amp	129.99 119.95
MC-320 Crystal mic cartridge for D-104	19.99

ASTRON (ASR)

RS-4L 3A ps, 4A surge, w/cig lighter socket	\$ 57.95 49.95
RS-7A 5A power supply, 7A surge	68.95 59.95
RS-10A 7.5A power supply, 10A surge	85.95 69.95
RS-12A 9A power supply, 12A surge	99.95 79.95
RS-12S 9A ps, 12A surge, w/speaker	112.95 89.95
RS-20A 16A power supply, 20A surge	121.95 99.95
RS-35A 25A power supply, 35A surge	197.95 149.95
RS-35A/220V 220v 25A ps, 35A surge	217.75 169.95
RS-50A 37A power supply, 50A surge	285.95 219.95
RS-70A 57A power supply, 70A surge	339.95 259.95
RS-20M 16A ps w/meters, 20A surge	144.95 119.95
RS-35M 25A ps w/meters, 35A surge	204.95 169.95
RS-50M 37A ps w/meters, 50A surge	314.95 239.95
RS-70M 57A ps w/meters, 70A surge	372.95 289.95
VS-20ML Variable 16A ps/meters, 20A surge	170.95 139.95
VS-25ML Variable 25A ps/meters, 25A surge	238.95 189.95
VS-50M Variable 37A ps/meters, 50A surge	330.95 259.95
RM-35M 25A rack mt ps/meters, 35A surge	318.95 249.95
RM-50M 37A rack mt ps/meters, 50A surge	354.95 279.95
RM-60M 50A rack mt ps/meters, 55A surge	467.95 359.95
SS-25 20A switching ps, 25A surge	161.95 129.95
SS-30 25A switching ps, 30A surge	186.95 149.95
SS-25M 20A switching ps/meters, 25A surge	186.95 149.95
SS-30M 25A switching ps/meters, 30A surge	212.90 169.95
12/115 200w solid state 12vdc-115vac inverter	86.95 69.95
2412 9A 22-32vdc to 13.8vdc converter	73.95 64.95

ASTRON - continued

2412-20 16A 22-32vdc to 13.8vdc converter	103.95 89.95
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AZDEN (AZD)

PCS-7300H 35w 440 FM/ITP micDm 249.95
PCS-9600M 35w 440 FM/9600 baudDf 599.95
TS-32P Tone decoder	.....Dm 49.95
AD-16 DC power cord for HT	.....Dm 9.95
BP-11A Extra 5w battery for HT	.....Dm 59.95
LC-16 Soft case for HT	.....Dw 19.95
HS-03 Boom mic/headphones; HF Xcv	.....Dwv 39.95
PTT-01 Switch; boom mic/headph	.....Dmwf 29.95

B & K (B&K)

114A 20k ohms/volt analog multimeter	Δm \$ 42.95 29.95
330 750A AC multi-function clamp mtr	Δmf 89.00 64.95
388A Test Bench DMM, 0.5% accuracy	Δf 119.00 84.95
541 Component comparator	.....Dm 449.00 249.95
810B Capacitance meter	.....Δmf 99.95 69.95
815 Tester (cap/res/Hfe/diode/batt)	Δmf 99.95 69.95
1646 0-16V, 0-10A power supply	.....Dm 499.00 279.95
2005A RF generator	.....Δm 275.00 199.95
2405 Mini Pro DMM	.....Δf 27.95 19.95
2700 Credit-card size bargraph DMM	.....Δf 34.95 24.95
2707 Tool kit DMM, plus logic/freq	.....Δmf 89.95 64.95
2831A Digital bench multimeter	.....Δm 299.00 209.95
2870 Survivor DMM/bargraph/true RMS	.....Δm 149.00 109.95
3001 Audio generator	.....Δmf 79.95 59.95

B & W COAX SWITCHES (B&W)

CSR-56 5-position, side connectors	.....Dmwf \$ 51.95
CS-66 6-pos, for desk/wall mounting	.....Dmwf 51.95

Note: Above switches provide grounding of unused terminals, & are supplied w/face plates & knobs.

LOW-PASS FILTER

FL-10/1500 1.5-30 MHz, 1kw, 52 ohms	\$ 75.95
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ANTENNAS

AP-10 57" portable 40/20/15/10/6/2m ant	\$ 69.95
AT-55 40/20/15/10m 55' trap antenna	87.95 82.95
AT-110 80/40/20/15/10m 110' trap antenna	99.50 94.95
AS-160 160/80/40/20m 137' trap dipole	164.50 154.95
AS-80 80/40/20m 78' trap dipole	127.50 119.95
AS-40 40/20/15/10m 40' trap dipole	164.50 154.95
AS-20 20/15/10m 23' trap dipole	127.50 119.95
AC-1.8-30 Continuous 1.8-30 MHz antenna	198.00 179.95
ACS-1.8-30 Continuous 1.8-30MHz stainless ant	298.00 269.95
CS-30 Continuous 5-30 MHz 65' antenna	198.00 179.95
ACS-5-30 Continuous 5-30 MHz stainless ant	298.00 269.95
ASW-90 500 KHz - 30 MHz 90' receive only ant	98.50 94.95
AXS-160 160/30m 96' trap dipole	99.50 94.95
AXS-80 80/40/15m 72' trap dipole	127.50 119.95
BWD-1.8-30 1.8-30 MHz 90' folded dipole	198.00 179.95
BWDS-1.8-30 1.8-30 stainless 90' folded dip	298.00 269.95

BAYGEN (BAY)

FPR-1B AM/FM/5.8-18SW 30 min Freeplay radio	\$ 99.95
SWL Antenna/FPA-7 Indoor SW antenna	19.99
FPR-2 AM/FM 60 minute Freeplay radio	69.95
FPR-2SC AM/FM/solar clear case Freeplay	79.99
FPR-2SM AM/FM/solar gray case Freeplay	79.99
AC Adapter/FPA-3 For FPR-2 series radio	10.99
Headphones/FPA-1 For FPR-2 series radio	14.99
FP-SL Self powered Freeplay lantern	69.95
Bulb/FPA-8 3-pack replacement bulbs	9.95
FPS-10 Patch cord for 3V output	6.95

BELDEN (BEL)

52 OHM COAXIAL CABLE	
8216 RG-174 (sub-miniature)	.....per ft. 26¢
8216	.....100 ft. Roll 37.29 24.95
8216	.....500 ft. Roll 129.87 89.95
8216	.....1000 ft. Roll 259.74 169.95
9201 RG-58 (solid center)	.....per ft. 20¢
9201	.....100 ft. Roll 29.74 18.95
9201	.....500 ft. Roll 109.89 79.95

BELDEN - continued

	Reg	Sale
9201 1000 ft. Roll	216.45	139 ⁹⁵
8240 RG-58U (solid center) .....per ft.		26 ⁹⁵
8240 100 ft. Roll	38.20	24 ⁹⁵
8240 500 ft. Roll	131.00	89 ⁹⁵
8240 1000 ft. Roll	262.00	169 ⁹⁵
8259 RG-58AU (stranded center) .....per ft.		29 ⁹⁵
8259 100 ft. Roll	43.00	26 ⁹⁵
8259 500 ft. Roll	137.00	89 ⁹⁵
8259 1000 ft. Roll	276.00	169 ⁹⁵
8219 RG-58AU (stranded, foam) .....per ft.		33 ⁹⁵
8219 100 ft. Roll	57.25	29 ⁹⁵
8219 500 ft. Roll	155.00	99 ⁹⁵
8219 1000 ft. Roll	387.50	189 ⁹⁵
8262 RG-58C (non-contaminating) .....per ft.		36 ⁹⁵
8262 100 ft. cut		32 ⁹⁵
8262 500 ft. Roll	173.00	119 ⁹⁵
8262 1000 ft. Roll	346.00	219 ⁹⁵
9258 RG-8X (stranded, foam) .....per ft.		39 ⁹⁵
9258 100 ft. Roll	81.25	34 ⁹⁵
9258 500 ft. Roll	217.56	129 ⁹⁵
9258 1000 ft. Roll	490.00	239 ⁹⁵
8237 RG-8U .....per ft.		64 ⁹⁵
8237 100 ft. Roll	102.00	59 ⁹⁵
8237 500 ft. Roll	390.00	249 ⁹⁵
8214 RG-8U (foam) .....per ft.		59 ⁹⁵
8214 100 ft. Roll	101.00	54 ⁹⁵
8214 500 ft. Roll	452.00	259 ⁹⁵
8214 1000 ft. Roll	898.00	489 ⁹⁵
9913 RG-8U (low loss) .....per ft.		59 ⁹⁵
9913 250 ft. Roll	244.00	129 ⁹⁵
9913 500 ft. Roll	486.00	239 ⁹⁵
9913F RG-8U (low loss, flexible) .....per ft.		87 ⁹⁵
9913F 100 ft. Roll	134.00	79 ⁹⁵
9913F 250 ft. Roll	289.00	159 ⁹⁵
9913F 500 ft. Roll	575.00	299 ⁹⁵
9251 RG-8A (non-contaminating) .....per ft.		87 ⁹⁵
9251 100 ft. Roll	132.09	79 ⁹⁵
9251 500 ft. Roll	492.84	299 ⁹⁵
8267 RG-213 (non-contaminating) .....per ft.		87 ⁹⁵
8267 100 ft. cut		79 ⁹⁵
8267 500 ft. Roll	597.18	349 ⁹⁵
8242 RG-9U (double shielded) .....per ft.,m		4 ⁹⁵
8242 100 ft. Roll,m	715.00	349 ⁹⁵

75 OHM COAXIAL CABLE

8241 RG-59U (73 ohm, solid center) .....per ft.	29 ⁹⁵
8241 100 ft. Roll	25 ⁹⁵
8241 500 ft. Roll	123.00
8241 1000 ft. Roll	246.00
8238 RG-11 (75 ohm, stranded center) per ft.	79 ⁹⁵
8238 100 ft. Roll	124.32
8238 500 ft. Roll	470.64
8213 RG-11 (75 ohm, solid, foam) .....per ft.	69 ⁹⁵
8213 100 ft. cut	59 ⁹⁵
8213 500 ft. Roll	360.00

ROTOR CABLE

8484 4-wire; 4-20 ga; U-105 .....per ft.	28 ⁹⁵
8484 100 ft. Roll	24 ⁹⁵
8484 500 ft. Roll	185.00
8484 1000 ft. Roll	370.00
8448 8-wire; 2-18, 6-22 ga; .....per ft.	29 ⁹⁵
8448 100 ft. Roll	103.75
8448 500 ft. Roll	412.50
8448 1000 ft. Roll	820.00
9405 8-wire; 2-16, 6-18 ga; .....per ft.	69 ⁹⁵
9405 100 ft. cut	64 ⁹⁵
9405 500 ft. Roll	585.00
9405 1000 ft. Roll	1167.50

ANTENNA WIRE

8000 No. 14 stranded ant wire .....per ft.	21 ⁹⁵
8000 100 ft. Roll	30.50

BELDEN - continued

	Reg	Sale
8000 1000 ft. Roll	275.00	159 ⁹⁵
No. 8 ALUMINUM GROUND WIRE		
8018 Multiples of 50 ft. ....each	\$ 19.00	12 ⁹⁵
8018 500 ft. Roll	150.00	99 ⁹⁵

Note: All above roll pricing is for rolls as shown only; all other lengths, even if more than roll length shown or a multiple of roll length shown, are sold at the per ft. price.

FOAM COAX w/PL-259s on BOTH ENDS

9349 3' RG-58AU foam .....each	\$ 19.32	14 ⁹⁵
9350 15' RG-58AU foam .....each	21.63	16 ⁹⁵
9352 50' RG-58AU foam .....each	32.13	24 ⁹⁵
9354 50' RG-8U foam .....each	60.90	46 ⁹⁵
9355 75' RG-8U foam .....each	84.00	64 ⁹⁵
9356 100' RG-8U foam .....each	101.85	79 ⁹⁵

BENCHER (BEN)

BY-1 Iambic keyer paddle w/black base .....each	\$ 92.95	87 ⁹⁵
BY-2 Iambic keyer paddle w/chrome base .....each	109.95	104 ⁹⁵
BY-3 Iambic keyer paddle, gold plated .....each	299.95	249 ⁹⁵
BY-4 Iambic paddle/blk base/gold components .....each	169.95	149 ⁹⁵
ST-1 Single lever keyer paddle, black base ...	92.95	87 ⁹⁵
ST-2 Sgl lever kyr paddle, chrome base .....each	109.95	104 ⁹⁵
ST-3 Single lever kyr paddle, gold plated Δmf	299.95	199 ⁹⁵
ST-4 Sgl lever paddle/blk base/gold comp Δwfv	169.95	99 ⁹⁵
RJ-1 Dlx hand key w/navy knob/black base ...	89.95	
RJ-2 Dlx hand key w/navy knob/chrome base	99.95	
XW-1 Low voltage DC fuse panel .....each	79.95	
XW-20 Fuse kit .....each	5.95	
XW-39 Crimp terminal kit .....each	3.95	
XW-40 Screw terminal kit .....each	4.95	
YA-1 1kw low pass filter .....each	69.95	
ZA-1A 3.5-30 MHz 1:1 balun .....each	42.95	
HWK Hardware kit; ZA-1A for 2" boom .....each	9.95	

BIRD (BIR)

43 Thruline Directional wattmeter, SO-239s	\$263.95
4300-400 Peak reading conversion kit .....each	125.95
43P Peak reading directional meter, SO-239s	396.95
4431 Wattmeter, variable RF tap, SO-239s ...	464.95
Elements (Table 1) 50H-1000H .....each	88.95
Elements (Table 1) 2500H, 5000H .....each	126.95
Elements (Table 1) 25-1000 MHz .....each	71.95
Low-power elements (Table 2) .....each	95.95

TABLE 1 - Standard Elements

Power Range	2-30	25-60	50-125	100-250	200-400	400-1000
5 watts	—	5A	5B	5C	5D	5E
10 watts	—	10A	10B	10C	10D	10E
25 watts	—	25A	25B	25C	25D	25E
50 watts	50H	50A	50B	50C	50D	50E
100 watts	100H	100A	100B	100C	100D	100E
250 watts	250H	250A	250B	250C	250D	250E
500 watts	500H	500A	500B	500C	500D	500E
1000 watts	1000H	1000A	1000B	1000C	1000D	1000E
2500 watts	2500H					
5000 watts	5000H					

TABLE 2 - Low-Power Elements

1 watt	Cat. No.	2.5 watts	Cat. No.
25-30 MHz	025-1	25-30 MHz	025-2
30-35 MHz	030-1	30-40 MHz	030-2
35-40 MHz	035-1	40-50 MHz	040-2
40-50 MHz	040-1	50-60 MHz	050-2
50-60 MHz	050-1	60-80 MHz	060-2
60-80 MHz	060-1	80-95 MHz	080-2
80-95 MHz	080-1	95-150 MHz	095-2
95-125 MHz	095-1	150-250 MHz	150-2
110-160 MHz	110-1	200-300 MHz	200-2
150-250 MHz	150-1	250-450 MHz	250-2
200-300 MHz	200-1	400-850 MHz	400-2
275-450 MHz	275-1	800-1000 MHz	801-2
425-850 MHz	425-1		
800-1000 MHz	801-1		

BIRD - continued

	Reg	Sale
CC-1 Carrying case .....each	46.95	
EC-1 Element case .....each	36.95	
25-T-MN 50w dummy load w/type N male	105.95	
50-T-MN 50w dummy load w/type N male	138.95	
4273 1.5-35 MHz variable RF sig sampler* ...	133.95	
4273-100 For Bird equipment installation ...	144.95	
4275 20-1000 MHz variable RF sampler* ...	128.95	
*2 QC connectors required - not included		
4275-100 For Bird equipment installation ...	144.95	
4304A 25-1000 MHz 500w wattmeter .....each	519.95	
QUICK CHANGE CONNECTORS (QC)		
4240-050 UHF female (SO-239) .....each	\$ 8.95	
4240-179 UHF male (PL-259) .....each	46.95	
4240-062 Type N female .....each	8.95	
4240-125 BNC female .....each	20.95	
4240-132 BNC male .....each, Δw	56.00	9 ⁹⁵

Other Bird items available on special order

BUCKMASTER (BUC)

HamCall CD-ROM ham listings; IBM/Mac	\$ 50.00
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BUTTERNUT (BUT)

Skyhawk 3X10 20-15-10m 10el, 24' boom/balun	\$995.00	869 ⁹⁵
HF-6VX 80/40/30/20/15/10m 26' vert ant	330.00	269 ⁹⁵
HF-9VX 80/40/30/20/17/15/12/10/6m vert ...	390.00	319 ⁹⁵
A17-12 17 & 12m kit for HF-6VX .....each	52.95	
CPK Counterpoise kit .....each	120.00	109 ⁹⁵
MPS Mounting post sleeve .....each	8.95	
RMK-II Roof mounting kit w/radials .....each	148.00	139 ⁹⁵
STR-II Radial kit only .....each	106.00	96 ⁹⁵
TBR-160S 160m resonator for HF-6VX .....each	110.00	99 ⁹⁵
HF-2V 80/40m 32' vertical .....each	242.00	199 ⁹⁵
30-MRK 30m resonator for HF-2V .....each	90.95	
TBR-160S 160m resonator .....each	110.00	99 ⁹⁵
HF-5B 2 el 20/17/15/12/10m butterfly beam	567.00	449 ⁹⁵
P-5 1:1 balun .....each	65.95	

CES (CES)

410 Personal Patch interconnect .....Dw	\$250.00	119 ⁹⁵
4700VP Telephone interconnect†	292.00	169 ⁹⁵
SDI-50 Dlx splx/dplx autopatch/rptr controller	760.00	469 ⁹⁵

CQ (CQX)

1999 Amateur Radio Calendar .....each	\$ 9.95
1999 Radio Classics Calendar .....each	9.95
33 Simple Weekend Projects .....each	15.95
Amateur Radio Almanac .....each	19.95
Building and Using Baluns and Ununs .....each	19.95
Buyers Guide .....each	15.95
Contest Video Getting Started in Contesting	19.95
DXing Video Getting Started in DXing .....each	19.95
Ham Sat Video Getting Started Amateur Satellites	19.95
Ham Video Getting Started in Ham Radio ...	19.95
Law McCoy on Antennas .....each	15.95
Packet Radio Operator's Manual .....each	15.95
Packet Video Getting Started in Packet Radio	19.95
Quad Antenna Book .....each	15.95
Shortwave Propagation Handbook .....each	19.95
Vertical Antenna Handbook .....each	9.95
VHF How To Book .....each	15.95
VHF Video Getting Started in VHF .....each	19.95
W6SAI HF Antenna Handbookeach	19.95

CAMBRIDGE (CAM)

The Art of Electronics (book)each	\$ 59.95
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CASTLE RIDGE (CRO)

SOLID BASE COPPERWELD ANTENNA WIRE		
AN-122 100 feet No. 12each	\$ 24.95	
AN-123 150 feet No. 12 .....each	29.95	
AN-124 250 feet No. 12 .....each	49.95	
AN-126 500 feet No. 12 .....each	84.95	
AN-128 1000 feet No. 12 .....each	154.95	139 ⁹⁵
AN-142 100 feet No. 14 .....each	19.95	

PRICE LIST

CASTLE RIDGE - continued

AN-143 150 feet No. 14	24.95
AN-144 250 feet No. 14	32.95
AN-146 500 feet No. 14	56.95
AN-148 1000 feet No. 14	104.95
AN-181 250 feet No. 18	14.95
AN-182 500 feet No. 18	24.95

CENTAUR (CEN)

CP-1 Cricket Pulser Station tuning acc. Dmwf	\$ 67.95
B1W10-50 1:1 3kw PEP balun for dipole	49.95
B1Y10-50 1:1 3kw PEP balun for yagi	49.95
B4Y10-50 4:1 3kw PEP balun for yagi	64.95
B4LW10-50 4:1 ladder line to coax balun	64.95

CHEROKEE (CHR)

AH-50 5w 6m FM HT w/nicad batt	\$ 399.95
AH-50SF 5w 6m FM HT/batt/selectable offset	249.95
BC-09 6 AA cell battery holder	13.95
BC-12 8 AA cell battery holder	17.95
CC-27 Leatherette case	13.95
DA-27 12v slide-on adapt. BC-09/NP-126	13.95
DC-27 Drop-in nicad charger	79.95
DW-12 Wall charger	7.95
EX-01 Speaker/mic	29.95
MA-27 Mobile-com cig/ext ant adapter	44.95
NP-126 12v nicad battery	69.95
SA-5 Extended super flex 6m antenna	24.95

CLOCKS

BMI 972A 12" 12-hour wall clock	\$ 28.95
BMI 972AD 14" 12/24-hour wall clock	32.95
BMI 973A 12" 24-hour wall clock	49.95
BMI 105C 24-hour quartz wall clock	19.95
MFJ 107B 24-hour digital clock	9.95
MFJ 108B 24/12-hour dual disp digital clock	19.95
MFJ 112 Deluxe world map clock	24.95
MFJ 114 Large LED 24-hour clock	39.95
MFJ 116 24/12-hr LED clock/10 minute timer	14.95
MFJ 118 Giant 24/12 hour LCD clock	24.95
MFJ 119 Giant 24/12 hour LCD/in temp clock	49.95
MFJ 152 Thermo clock; in/out temp/24-hr	24.95

COAX SEAL (UNV)

104 1/2" x 60' coax seal	\$ 2.95
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COMET (CMT)

MOBILE ANTENNAS

B-10 2m/440 2.15db 12" cell look-alike ant	\$ 39.95
B-10NMO 2m/440 2.15db 12" cell look-alike NMO	39.95
B-20 2m/440 2.15/5db 30" cell look-alike ant	49.95
B-20NMO 2m/440 2.15db/5db 30" cell look NMO	49.95
CA-2X4SR 2m/440 3.8/6.2db 40" mob ant	64.95
CA-220MR 2m/440 2.4db 3' 3" fold-over ant	49.95
CA-HV 40/15/10/6/2m 5' 10" mobile ant	139.95
L-14 20m loading coil for CA-HV	36.95
L-18 17m loading coil for CA-HV	29.95
CHL-28J 2m/440 3/5.5db 36" mobile ant	29.95
CHL-28NMO 2m/440 3/5.5db 36" NMO ant	29.95
CHL-62S 2m/440 3.5/6db 42" mobile ant	49.95
CHL-62SNMO 2m/440 3.5/6db 42" NMO ant	49.95
CHL-350 10/6m 0/2.15db fold-over 7' ant	79.95
FL-7HA 40m 40" mobile antenna	Df
FS-92B 2m/440/1.2 2.1/4.1/6.8 23" N Dm	82.95
HA-4S 40/15/12/10m 4' 5" mobile ant	199.95
L-14HS 20m loading coil for HA-4S	39.95
L-18HS 17m loading coil for HA-4S	39.95
HA-03S 80m 45" mobile antenna	82.95
HA-050 6m 33" 1/4 wave mobile antenna	82.95
HP-32 2m/440 3/5.5db 34" 350/250w ant	89.95
M-24B 2m/440 1.7/4.1db mag mt ant w/BNC	39.95
M-24M 2m/440 1.7/4.1db mag mt w/PL259	39.95
QE-07 40m 50" mobile antenna	82.95
QE-14 20m 49" mobile antenna	82.95
QE-21 15m 49" mobile antenna	82.95
QE-28 10m 46" mobile antenna	82.95
OP-07 40m optional element for QE ant	42.95

COMET - continued

OP-14 20m optional element for QE ant	42.95
OP-21 15m optional element for QE ant	42.95
OP-28 10m optional element for QE ant	42.95
QE-5 2m/440 2.15/5.5db 38" quick release	54.95
R-2000 900MHz 5.1db 19" type N mob ant	42.95
SBB-1 2m/440 1.5/2.15db 16" flex mobile ant	39.95
SBB-1NMO 2m/440 1.5/2.15db 16" flex NMO	39.95
SBB-2 2m/440 2.15/3.8db 18" black mobile	39.95
SBB-2NMO 2m/440 2.15/3.8db 18" blk NMO	39.95
SBB-5 2m/440 3/5.5db 38" black mobile ant	54.95
SBB-5NMO 2m/440 3/5.5db 38" black NMO	54.95
SBB-7 2m/440 4.5/7.2db 4' 7" black mob ant	74.95
SBB-7NMO 2m/440 4.5/7.2db 4' 7" blk NMO	74.95
SB-14 6m/2m/440 4.3" chrome mobile ant	64.95
SB-15 6m/2m/440 2.15/4.5/7.2db 5' chr mob	89.95
SBB-25 2m 4.1db black mobile antenna	44.95
SBB-25NMO 2m 4.1db black NMO mob ant	44.95
SB-44 440 5db 29" mobile antenna	54.95
SB-83 2m/440/cell 3/6.8/4db 35" type N ant	68.95
SBB-94 2m/440/1.2 black 24" N antenna	69.95
SB-97 2m/440/1.2 3.6/8.9/6db 39" type N	79.95
SB-123 1.2GHz 7.2db 24" type N mobile ant	54.95
SB-214W 2m/220 3' 1.7/3.4db mob ant	49.95
SBB-224 2m/220/440 2.15/3.2/5.5 blk mob	74.95
SBB-224NMO 2m/220/440 2.15/3.2/5.5 blk NMO	74.95
SB-220MR 220 4.2db 3' 3" mobile antenna	49.95
SF-245 2.4 GHz 7db 18" fg type N ant	61.95
Z-750 2m/440 2.1/5.5db 39" theft resistant	62.95
Z-780 2m/440 4.5/7.2db 5' theft resistant	82.95

MOBILE MOUNTS, ETC

3D4M Mobile mt, 13' coax w/UHF connectors	\$ 24.95
3D4N Mobile mt, 13' coax w/Type N	28.95
3D5M Mobile mt, 16.5' coax w/UHF connectors	27.95
5D4N Roof mount, 13' coax w/Type N	31.95
AD-10N N-NMO mobile adapter	17.95
AD-15M UHF-NMO mobile adapter	17.95
CA-M51 Mag mt only, no coax; add 3D4M, etc	22.95
CG-4M RS-2 gutter mount w/13.5' coax	29.95
CK-3M Dlx 2-step 10' cable w/UHF connectors	33.95
CK-3M5 Dlx 2-step 16.5' cable w/UHF connects	39.95
CK-5N Dlx cable assembly w/Type N	47.95
CM-5M Hvy duty mag mt, coax, max 4' ant	24.95
CQ-5M Dlx black QD trunk lip mt w/17' coax	66.95
CQ-5N Dlx black QD tnk lip mt/17' coax/N	69.95
CR-5M Std coax assy, 16.5' coax, UHF conn	19.95
CT-5M Trunk lip mount w/17' coax	39.95
GR-5M Dlx tnk lip mt w/coax; matches SB	67.95
GR-5N Dlx N tnk lip mt w/coax; matches SB	69.95
MS-3FVNN Std duty mag mount w/Type N	49.95
MS-5LXMM Dlx mag mt, 2-step cable/UHF mt	57.95
RS-2 Small gutter mount	22.95
RS-6 Pipe clamp mount	29.95
RS-9 Trunk lip mount, no coax	11.95
RS-20 Gtr mt; small/med ants, no coax	29.95
RS-500 Mini heavy duty gutter mount	29.95
RS-520 Mini heavy duty trunk/hatch mount	28.95
RS-560C Luggage rack mount, no coax	35.95
RS-720 Hatch/rear door/tnk multi-adj mt	29.95
RS-720NMO Hch/rear door/tnk multi-adj NMO mt	29.95
RS-820 Low profile trunk lip mount, no coax	39.95
RS-850 Luggage rack mt, no coax	42.95
WS-1M Window clip mt w/UHF connectors	64.95

BASE STATION ANTENNAS

CA-712EF 440 9db 10' 5" base antenna	\$ 119.95
CA-ABC21 2m 3.4db 4' 7" base antenna	49.95
CA-ABC22A 2m 6.5db 9' 5" base/rptr ant	69.95
CA-ABC23 2m 7.8 db 13' 4" base/rptr ant	109.95
CA-7F26F 440-470 6db 3' 6" tunable ant	119.95
CA-Super22 2m/220 6.6db 8' 2" base ant	159.95
CA-52HB4 6m 4 el 10.4db beam	129.95
CMR-241 2m/440 4.5/7.2db 6.5' rptr ant Dvw	174.95
CK-333 2m/220/440 6.5/7.8/9db 10.25' ant	189.95
CYA-240 2m/440 9.5/11.6 3/5el 5.25' bm yagi	109.00
CYA-121BE 1.2GHz 16el 16.6db 4' 5" N beam	149.95

COMET - continued

DS-15 6m/2m/440/900/1.2 discone antenna	99.95
GH-50 6m 2.15db 7' 10" fg base antenna	119.95
GP-3 2m/440 4.5/7.2db 5' 11" base/rptr ant	99.95
GP-6 2m/440 6.5/9db 10' 2" base/rptr ant	159.95
GP-9 2m/440 8.5/11.9db 17' 8" base/rptr	199.95
GP-9M 2m/440 8.5/11.9db 17' 8" N base/rptr	199.95
GP-15 6/2m/440 3.6/2/8.6db 8' base	164.95
GP-21/CA-1221S 1.2 14.8db 8.5" N base/rptr	159.95
GP-24 2.4GHz 12.4db 2' type N base/rptr	229.95
GP-93 2m/440/1.2 5.7/2.1/0db 5' 7" type N	139.95
GP-98 2m/440/1.2 6.5/9/13.5db 9' 8" N ant	209.95
KP-20 900 MHz 9.2db 7' 4" type N base/rptr	121.95
PYA-913 900MHz 13el 15.8db 4' 8" type N beam	169.95

DUPLEXERS AND TRIPLEXERS

CF-142 1.3-150/200-480 600/400w UHF/leads	\$ 69.95
CF-360A 1.3-30/50-470 600w UHF w/leads	69.95
CF-360B 1.3-30/50-470 600w UHF/common lead	69.95
CF-413A 440/1.2 500/200w N w/leads	74.95
CF-413B 440/1.2 500/200w N/UHF/N leads	74.95
CF-416A 2m/440 800/500w UHF w/leads	46.95
CF-416C 2m/440 800/500w UHF/N leads	49.95
CF-416W 1.3-250/400-1400 400/200w N/leads	69.95
CF-530 1.3-90/125-470 600w UHF w/leads	69.95
CF-706 1.3-56/75-320 350w UHF w/leads	69.95
CF-4130A 440/1.2 500/200w N, no leads	74.95
CF-4160I 2m/440 800/500w UHF/UHF/N, no leads	45.95
CF-4160J 2m/440 800/500w SO239, no leads	53.95
CF-4160K 2m/440 800/500w all UHF, no leads	45.95
CFX-324A 2m/220/440 600w UHF w/leads	88.95
CFX-324B 2m/220/440 600w UHF, no leads	85.95
CFX-431A 2m/440/900-1.2 N/UHF/N/N, leads	85.95
CFX-431B 2m/440/900-1.2 N/UHF/UHF/N, leads	85.95
CFX-514 HF/2m/440 800/800/500w UHF w/leads	79.95
CFX-514J HF/2m/440 800/800/500w UHF, no leads	74.95
CFX-4310B 2m/440/900-1.2 N/UHF/VN, no leads	79.95
CFX-4310C 2m/440/1.2; Kenwood TM-741A/941A	79.95
CFX-5140 HF/6m/2m/440 800/800/500w UHF, no leads	74.95

HT AND HAND-HELD SCANNER ANTENNAS

BNC-24 2m/440 17' 2.15/5.3db BNC whip	\$ 22.95
CH-32 2m/440 1.75" BNC antenna	29.95
CH-72S 2m/440 0/3.2db 15" BNC ant	29.95
CH-75 2m/440 0/3.2db 14.75" BNC ant	25.95
CH-701X 2m/440/900 2/3.4/5.5db 19" BNC	54.95
CH-720C 2m/440 0/3.8db 18" BNC	39.95
CH-722SA 2m/440 3/5.5db BNC whip ant	45.95
CY-1205BNC 1.2GHz 11db 7" BNC beam	49.95
SH-55 2m/440 1.5/3.2db 15" BNC ant	33.95
SH-95 2m/440/1.2 1.5/2.15/5.5db BNC ant	34.95
SMA-3 2m/440 1.2/1.7db 9.75" SMA ant	39.95
SMA-24 2m/440 17' 2.15/5.3db SMA whip	22.95
SMA-501 2m/440/900 1.5" SMA ant	29.95
SMA-503 2m/440 8.75" SMA antenna	29.95

SWR/POWER METERS & MINIMETERS

CM-120 1240-1300 MHz type N minimeter	\$ 99.95
CM-690 1.9-60 MHz 20/150w minimeter	79.95
CM-720 140-150/430-450 MHz minimeter	79.95
CM-720N 140-150/430-450 type N minimeter	84.95
CM-903 900-920 MHz type N minimeter	99.95
CMX-1 1.8-60 MHz 2000w SWR/pwr/rem head	199.95
CMX-2 1.8-200MHz 200w SWR/pwr/rem head	179.95
CMX-3 140-255 MHz 200w SWR/pwr/rem head	169.95
EKS-3 10' remote head extension cable	23.95

ACCESSORIES

CS-290P 1500MHz 150w N lightning protect	\$ 39.95
CS-400P 500MHz 250w lightning protect	34.95
CSP-30 Mini speaker w/magnet mt	34.95
CSP-80 Mini spkr/mag mt/noise fil/mute	39.95
CSW-20N 0-1300MHz N coax switch	99.95
HM-P2F Mini spkr/mic; Al/Alco/Sta/Yae	32.95
HM-P2K Mini spkr/mic for Kenwood	32.95
HM-P4F Mini "HT" spkr/mic; Al/Alco/Sta/etc	32.95
HM-P4K Mini "HT" spkr/mic for Kenwood	32.95
HM-P4Y Mini "HT" spkr/mic for Yaesu	32.95

Communications Specialists (COM)

SS-64	64-tone mini prog CTCSS encoder	\$ 28.95
TE-32	32-tone CTCSS prog encoder box	49.95
TE-64	64-tone CTCSS/burst switch enc box	79.95
TS-64DS	64-tone CTCSS prog encoder/decoder	57.95
DTD-1	DTMF decoder	49.95
ID-8	Automatic morse station identifier	69.95

CONNECTORS

AMPHENOL COAX CONNECTORS (AMP)

83-1SP-1050	Male coax plug (PL-259)	\$ 1.95
83-1SP	Silver plated coax plug (PL-259)	2.95
Van Gorden (VAN)	silver plated teflon PL-259	2.99
83-185	Reducer for RG-58 (UG-175)	.95
83-168	Reducer, RG-59/RG-8X (UG-176)	.95
83-1AP	Right angle adaptor (UG-646)	5.95
83-1J	Double female adaptor (PL-258)	3.95
83-1R	Female chassis mt socket (SO-239)	2.95
83-1H	Hood; in-line use w/83-1R (UG-106)	4.95
83-1T	T-connector adaptor (M-358)	8.95
83-877	Double male adaptor	10.95
83-878	Single hole 3/8" chassis socket	2.95

31-002	BNC male connector for RG-58	3.95
31-012	BNC male connector; RG-59/RG-8X	4.95
31-221	BNC female chassis socket	2.95
82-24	Type N female chassis mt socket	4.95
82-61	Type N male connector for RG-8	7.95
82-64	Type N right angle adaptor	20.95
82-202-1006	Type N male; 8214/9913/9913F	6.95
82-209	Type N female in-line for RG-8	6.95
34025	Type N male connector for RG-58	6.95

AMPHENOL COAX ADAPTORS (AMP)

2900	SO-239 to BNC male adaptor	\$ 9.95
4400	SO-239 to Type N male adaptor	13.95
34125	Type N female - PL-259 adaptor	21.95
31-28	BNC female to PL-259 adaptor	10.95
83-10	SO-239 to Motorola/phone plug	10.84

AIM CONNECTORS, PLUGS & ADAPTORS (AIM)

19-1289	8-pin female mic plug	\$ 4.95
25-7351	Chassis mt SO-239 double female	3.95
25-7365	BNC female to SO-239	3.95
25-7420	BNC male to SO-239	2.95
26-8010	Type N double female	3.95
26-8011	Type N chassis mount	2.95
26-8015	N male to SO-239	4.95
26-8016	BNC female to N male	4.95
26-8017	BNC male to N female	4.95
27-8110	BNC female to RCA male	1.95
27-8120	BNC female to PL-259	2.95
27-8130	BNC double male	3.95
27-8140	BNC T; 2 female, 1 male	2.95
27-8142	BNC T, 3 male	6.40
27-8450	BNC chassis mt, 4 screw holes	2.95
27-8460	3/8" hole BNC chassis mt	1.95
27-8470	Dual BNC chassis mount	3.95
29-3855	BNC female to SMA male	3.95
29-4120	"T" 1 male, 2 female	4.95
29-4150	SO-239 to mini PL-259	2.95
29-4155	Mini SO-239 - BNC male adapt	5.95

CONNECTORS UNLIMITED (CON)

306	SO-239 to BNC male adaptor	\$ 2.76
1721	7-pin DIN plug	1.38

Switchcraft 1/4" Plugs w/Solder Terminals (SWI)

220	2-cond, plastic, screw terms, rt ang plug	\$ 5.95
237	3-cond, plastic handle, rt angle plug	5.15
250	2-conductor, plastic handle	3.95
260	3-conductor w/screw terminals	6.95
267	3-conductor, plastic handle	5.50
280	2-conductor, metal handle	4.95
297	3-conductor, metal handle	6.95

SWITCHCRAFT PHONO-TYPE CONNECTORS (SWI)

3501MC	Phono plug with cable clamps	\$.95
3502	Shielded phono plug	2.95

Reg Sale

CONNECTORS - continued

3507	RF-type phono plug	3.95
VANCO MICROPHONE CONNECTORS (VCO)		
CBC-2	2-pin female mic plug	\$ 3.95
CBC-3	3-pin female mic plug	2.95
CBC-4	4-pin female mic plug	4.95
CBC-4P	Panel mt 4-pin male	2.95
CBC-5	5-pin female mic plug	3.95
CBC-5P	Panel mt 5-pin male	2.95
CBC-6	6-pin female mic plug	4.95
CBC-6P	Panel mt 6-pin male	3.95
CBC-8P	Panel mt 8-pin male	5.95

KENWOOD DIN PLUGS (KEN)

7-pin DIN plug	\$ 4.95
8-pin DIN plug	6.95
13-pin DIN plug	9.95

VANCO MINI PHONE PLUGS (VCO)

P-25	2.5mm sub-miniature phone plug	\$.99
P-35	3.5mm miniature phone plug	.99
P-12V	Cig lighter plug w/leads	2.95

Connect Systems (CSY)

CS-700	Simplex interconnect	Dmwf \$485.00	229 ⁹⁵
CS-800	Full duplex patch & repeater controller	485.00	359 ⁹⁵
CS-900	Simplex interconnect	485.00	359 ⁹⁵
CD-2	DTMF/CTCSS/DCS decoder unit/RS-232	284.00	249 ⁹⁵
CD-2P	PC application program for CD-2	113.00	99 ⁹⁵
LT-2P	PC application program for LT-2	113.00	39 ⁹⁵

COYNE (COY)

MacHam General	.....	Δm \$ 34.95	19 ⁹⁵
MacHam Advanced	.....	Δm 34.95	19 ⁹⁵
MacHam Extra	.....	Δm 34.95	19 ⁹⁵
MacHam Radio Morse Code training soft	Δm 39.95	19 ⁹⁵

CROSS DEVICE (CRS)

STUF	Cross connector waterproofing filler	\$ 4.95
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CUSHCRAFT (CUS)

VHF/UHF FM BEAMS* (Vertical polarization)

A148-3S	2m, 3 el wideband beam	\$ 47.95
A148-10S	2m, 10 el wideband beam	85.00
A148-VPKS	Stack kit; 2 A148-3S/10S	108.00
A148-20S	2 A148-10S vert stacked	233.00
A449-6S	440 MHz, 6 el, 3' boom, 10 db	45.95
A449-11S	440 MHz, 11 el, 4.5' boom, 13 db	69.00

*These antennas can be mounted vertically or horizontally!

DUALBAND 2M/440 FM BEAMS* (Vert polarization)

A270-6S	2m/440, 3/3 el, 2.8' boom, 7.8 db	\$ 75.00
A270-10S	2m/440, 5/5 el, 6.17' boom, 10 db	99.00

*These antennas can be mounted vertically or horizontally!

FM VERTICAL STACKING KITS* (Adds 3 db)

A14-SK	Harness only for 2 A148-3S	Dmwf \$ 48.00	9 ⁹⁵
A148-SK	Harness only; 2 A148-10S	Dmwf 48.00	29 ⁹⁵

*Prices are for stacking kits only

FM RINGOS - 1/2 Wave Verticals - 3.75 db

AR-10	10m FM Ringo, 1000w	\$ 85.00	79 ⁹⁵
AR-6	6m FM, 1000w	71.00	64 ⁹⁵
AR-2	2m FM, 1000w	50.00	44 ⁹⁵
AR-450	440 MHz FM 500w	35.95	

RINGO RANGERS - FM Verticals - 6 db

ARX-6	6m FM Ringo Ranger	\$259.00	199 ⁹⁵
ARX-2	2m FM Ringo Ranger	60.00	54 ⁹⁵
ARX-2B	2m FM Ringo Ranger II, 1000w	73.00	59 ⁹⁵
ARX-220B	220 FM Ringo Ranger II, 500w	73.00	64 ⁹⁵
ARX-450B	440 FM Ringo Ranger II, 500w	73.00	64 ⁹⁵

DUALBAND 2M/440 FM VERTICALS

AR-270	2m/440 MHz FM, 250w, 3.7/5.5db	\$ 88.00	79 ⁹⁵
AR-270B	2m/440 MHz FM base ant	128.00	99 ⁹⁵
ARX-270N	2m/440 9/12 db fg type N ant	310.00	249 ⁹⁵
ARX-270U	2m/440 9/12 db fg SO-239 ant	310.00	249 ⁹⁵

TWIST, OSCAR BEAMS (Horiz/Vert Polarization)

A148-20T	2m 20el 10.8'bm 11.1db twist	\$133.00	109 ⁹⁵
22XB	2m 22el 19.3' bm 14db circ beam/relay	298.00	229 ⁹⁵
719B	432 19 el beam	142.00	119 ⁹⁵

Reg Sale

CUSHCRAFT - continued

729B	432 29 el beam	225.00	189 ⁹⁵
738XB	432 38el 14.3'bm 15.5db circ w/relay	276.00	219 ⁹⁵
PS-4A	Remote polarity switch	Dv 150.00	69 ⁹⁵

BOOMER ANTENNAS

617-6B	6m Boomer, 6 el, 34' boom, 14 db	\$435.00	329 ⁹⁵
124WB	2m Boomer, 4 el, 4' boom, 10.2 db	73.00	64 ⁹⁵
13B2	2m Boomer, 13 el, 15' boom, 15.8 db	142.00	119 ⁹⁵
17B2	2m Boomer, 17 el, 31' boom, 18 db	246.00	199 ⁹⁵
26B2	2 13B2s vertically stacked	406.00	299 ⁹⁵
224WB	220 Boomer, 4 el, 3' boom, 10.2db	59.00	54 ⁹⁵
225WB	220 wideband Boom, 15el, 10'bm, 15.5db	153.00	124 ⁹⁵

BOOMER STACKING KITS*

617-SK	Harness, pwr divider; 2 617Bs Dmwf	\$160.00	49 ⁹⁵
22-SK	Harness, power divider; 2 13B2s	100.00	89 ⁹⁵
22N-SK	Harness, pwr divider; 2 17B2s	165.00	129 ⁹⁵
26B2-VPK	Vertical polar kit; 2 13B2s	175.00	139 ⁹⁵
220-SK	Harness, pwr divider; 2 220Bs Dw	98.00	29 ⁹⁵
220-QK	Quad stacking kit for 4 220Bs Dw	390.00	69 ⁹⁵
PD-2	Power divider for 2 13B2s	49.95	
PD-2N	Power divider for 2 17B2s Dw	91.00	79 ⁹⁵
PD-4	Power divider for 4 13B2s	63.00	56 ⁹⁵
PD-4N	Power divider for 4 17B2s	113.00	99 ⁹⁵
PD-224	Power divider; 4 220 Boomers Dmwf	61.00	19 ⁹⁵

*Prices are for stacking kits only

VHF/UHF BEAMS* (Horizontal polarization)

A50-3S	6m, 3 el, 6' boom, 8 db, stainless hdwre	\$110.00	99 ⁹⁵
A50-5S	6m, 5 el, 12' boom, 10 db, stainless hdwre	182.00	149 ⁹⁵
A50-6S	6m, 6 el, 20' boom, 11db, stainless hdwre	304.00	249 ⁹⁵
A148-10S	2m, 10 el wideband beam	85.00	79 ⁹⁵
A430-11S	440 MHz, 11 el, 4' boom, 13 db	69.00	64 ⁹⁵

*These antennas can be mounted vertically or horizontally!

HORIZONTAL STACKING KITS* (Adds 3 db)

A17-SK	For 2 A144-7S, 79" spacing	Dmwf \$ 48.00	9 ⁹⁵
A41-SK	For 2 A430-11S, 26" spacing	Dw 48.00	14 ⁹⁵

*Prices are for stacking kits only

MOBILE ANTENNAS

CG-144A 2m 1/4" mag Gold series coil/whip only Dmwf \$114.00			
CS-28M	10m magnet mt antenna	66.00	59 ⁹⁵
CS-50M	6m magnet mt 3 db antenna	66.00	59 ⁹⁵
CS-50T	6m trunk lip mt 3 db ant	Dv 64.00	34 ⁹⁵
CS-147M	2m magnet mt 3 db antenna	\$ 66.00	59 ⁹⁵
CS-147A	2m coil & whip only	44.95	
CS-120	220 3/4" hole mt 3 db antenna	Dwf 55.00	29 ⁹⁵
CS-220M	220 magnet mt 3 db antenna	66.00	59 ⁹⁵
CS-220T	220 trunk lip mt 3 db ant	Dmwf 64.00	29 ⁹⁵
CS-450	440 3/4" hole mt 5 db antenna	Dmf 55.00	39 ⁹⁵
CS-450M	440 magnet mt 5 db antenna	66.00	59 ⁹⁵
CS-450T	440 trunk lip mt 5 db ant	Dwf 64.00	49 ⁹⁵
CS-450A	440 coil & whip only	Df 43.00	24 ⁹⁵

DUALBAND 2M/440 MOBILE ANTENNAS

CS-270M	2m/440 3.7/6 db magnet mt ant	\$ 87.00	79 ⁹⁵
CS-270A	2m/440 coil & whip only	60.00	54 ⁹⁵

MOUNTS ONLY FOR MOBILE ANTENNAS

CG-MG	Gold series magnetic mount	\$ 35.95
CG-MGN	Gold series mag mt w/N connector	35.95
CS-MG	Magnetic mount	29.95
CS-MGN	Magnetic mount w/N connector	29.95
CS-TL	Trunk lip mount	29.95

SKYWALKER HF BEAMS

20-4CD	20m, 4 el, 32' boom, 10 db	Dwf \$665.00	429 ⁹⁵
20-3CD	20m, 3 el, 20' boom, 8 db	Dw 485.00	349 ⁹⁵

MULTIBAND VERTICAL ANTENNAS

APR-18A	Radial kit; AP-8A	Df \$ 70.00	49 ⁹⁵
R-6000	20/17/15/12/10/6m vertical	365.00	269 ⁹⁵
R-7000	40/30/20/17/15/12/10m vertical	510.00	379 ⁹⁵
R-80	80m kit for R-7000	155.00	129 ⁹⁵

ROTATABLE DIPOLES

D-3	20/15/10m World Ranger dipole	\$250.00	199 ⁹⁵
D-3W	30/17/12m rotatable dipole	250.00	199 ⁹⁵
D-4	40/20/15/10m World Ranger dipole	340.00	269 ⁹⁵
D-40	40m World Ranger dipole	305.00	239 ⁹⁵

PRICE LIST

CUSHCRAFT - continued

	Reg	Sale
BIG THUNDER TRI-BAND BEAMS		
X-9 20/15/10m, 9 el, 28' boom, 13/14db	\$995.00	749 ⁹⁵
X-940 40m 1 element add-on kit for X-9 ...	275.00	229 ⁹⁵
X-7 20/15/10m, 7 el, 18' boom, 12.5/13db ..	675.00	499 ⁹⁵
X-740 40m add-on kit for X-7	275.00	229 ⁹⁵

BIG THUNDER MONOBAND BEAMS

XM-240 40m, 2 el, 23' boom, 7 db	\$719.00	509 ⁹⁵
XM-520 20m, 5 el, 35' boom, 9.3db	789.00	559 ⁹⁵
XM-515 15m, 5 el, 24' boom, 9.3db	449.00	319 ⁹⁵
XM-510 10m, 5 el, 19' boom, 9.3db	329.00	229 ⁹⁵
TEN-3 10m, 3 el, 8' boom, 8 db	189.00	149 ⁹⁵

MULTIBAND BEAM ANTENNAS

A-3S 20/15/10m, 3el, 14'bm, 8db, stainless hdwr	\$497.00	349 ⁹⁵
A-743 40m or 10 MHz add-on kit; A-3/A-3S	159.00	129 ⁹⁵
A-4S 20/15/10m, 4el, 18'bm, 9db, stainless hdwr	597.00	429 ⁹⁵
A-744 40m or 10 MHz add-on kit; A-4/A-4S	159.00	129 ⁹⁵
A-3WS 17 & 12m, 3 el, 14' boom, 8 db	390.00	289 ⁹⁵
A-103 30m add-on kit for A-3WS	159.00	129 ⁹⁵
ASL-2010 13.5-32MHz 8el 18' bm 6.4db LP	828.00	599 ⁹⁵
AFB-2 160-10m 9-band balun	60.00	29 ⁹⁵

LIGHTNING ARRESTORS

LAC-4 200w SO-239 gas tube arrestor	\$43.95	
LAC-4H 2kw SO-239 gas tube arrestor	48.95	
LAC-4N 200w type N gas tube arrestor	55.95	
LAC-4NH 2kw type N gas tube arrestor	60.95	
LC-2 Extra 200w cartridge for LAC-4/4N	19.95	
LC-2KW Extra 2kw cartridge for LAC-4H/4NH	21.95	
5VB Vinyl connector boots	13.95	

DCI (DCI)

145-2H 2m 144-146MHz 200w bandpass filter	\$89.95	
146-4H 2m 144-148MHz 200w bandpass filter	89.95	
223.5-3H 222-225MHz 200w bandpass filter	89.95	
2m/220 models w/N connectors add \$10 special order		
435-10C 430-440MHz 200w N bandpass filt	109.95	
445-10C 440-450MHz 200w N bandpass filt	109.95	

DC SALES (DCS)

Tenna Hitch Antenna mount for trailer hitch	\$35.95	
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DAIWA (DAI)

CS-201 2-position 600 MHz coax switch	\$29.95	
CS-401 4-position 800 MHz coax switch	129.95	
CN-101 1.8-150MHz SWR/power meter/light	94.95	
CN-103M 140-525MHz SWR/power meter	99.95	
CN-410M 3.5-119MHz 15/150w mob meter ..	119.95	
CN-460M 140-450MHz 15/150w mob meter ..	99.95	

DAVIS (DAV)

7400 Perception II indoor WX unit	\$150.00	129 ⁹⁵
7415 Wizard II-S weather station	150.00	129 ⁹⁵
7425 Wizard III weather station	195.00	169 ⁹⁵
7440 Monitor II weather station	395.00	349 ⁹⁵
7852 Rain Collector II, 0.01"	75.00	69 ⁹⁵
7977 Electronic rain counter, 0.01"	30.95	
7859 External temp/humd Sensor II; 7440	125.00	109 ⁹⁵
7862 Weatherlink IBM interface/software...	165.00	139 ⁹⁵
7866 Weatherlink Mac interface/software...	165.00	139 ⁹⁵
7870 Modem adapter for 7862/7866	7.95	
7867 Weatherlink IBM conversion kit	50.95	
7868 Weatherlink Mac conversion kit	50.95	
7873 Cig lighter power cord	9.95	
7876-040 4-conductor 40' extension cable	18.95	
7878-040 6-conductor 40' extension cable	22.95	
7880 8-conductor 25' junction box cable ..	15.95	
7881 8-conductor 50' junction box cable ..	25.95	
7882 8-conductor 100' junction box cable	45.95	
7890 Mast mount for anemometer	16.95	
0131 Weather forecasting quick reference card	9.95	
0271 Turbo Meter handheld dig wind indicator	165.00	99 ⁹⁵
0281 Wind Wizard handheld wind indicator ..	46.95	
7520 Stand alone 0.01" rain gauge/elec ctr Dm	95.00	49 ⁹⁵

DELORE (DEL)

Topo USA US topographical maps CD-ROM ...	\$99.95	
Triplate Laptop PC GPS/Street Atlas soft .Dmwf	149.95	139 ⁹⁵
Earthmate Laptop PC GPS/Street Atlas soft ..	159.95	

DIAMOND (DIA)

SWR/POWER METERS

SX-20C HF/6m/2m 30/300w meter	\$89.95	
SX-40C 144-470 (220 w/correction) 15/150w	79.95	
SX-100 1.6-60 MHz 30/300/3kw PEP meter ..	144.95	134 ⁹⁵
SX-200 1.8-200 MHz 5/20/200w PEP meter ..	104.95	94 ⁹⁵
SX-400 140-525 MHz 5/20/200w PEP meter ..	124.95	114 ⁹⁵
SX-600 Dual band 1.8-160/140-525 200w PEP mtr	179.95	169 ⁹⁵
SX-1000 1.8-160/430-1300MHz 200w PEP meter ..	234.95	214 ⁹⁵

HT & HANDHELD SCANNER ANTENNAS

RH-3 2m/440 1.75" BNC mini HT duck	\$24.95	
RH-77CA 2m/440 15" BNC rubber gain ant ..	24.95	
RH-205 2m 3/4 wave telescopic HT antenna ..	24.95	
RH-519 2m/440 8.3" flexible BNC whip	27.95	
RH-707 2m/440 8 1/2" tilttable BNC whip	33.95	
RH-951S 2m/440/1.2GHz 15" BNC slim duck	44.95	
SRH-519 2m/440 8.3" flexible SMA whip	32.95	
SRH-805 2m/440/1.2GHz 1.75" SMA ant	27.95	
SRH-815 2m/440/1.2GHz 6" flex SMA whip ..	36.95	

MOBILE-BAND MOBILE ANTENNAS

NR-2C 2m 4.1db 55.5" mobile antenna	\$39.95	
NR-124 1.2GHz 8.4db 25" type N mobile ant	59.95	
NR-140A 220 4db 37" mobile antenna	53.95	
SG-2000A 2m 5.2db 62" mobile antenna .Dv	75.95	
SG-2000HD 2m 5.2db 62.6" 250w mob ant ..	89.95	
SG-6000NMO 6m 2.15db 39" NMO mobile	64.95	

DUAL-BAND MOBILE ANTENNAS

CR-214S 2m/220 2.1/3.4db 37" mobile ant ..	\$58.95	
CR-224A 2m/220 5/6db 69" mobile antenna	109.95	99 ⁹⁵
NR-72BNMO Black 2m/440 2.15db 14" NMO	41.95	
NR-73BNMO Blk 2m/440 2.15/5.5db 34" NMO	57.95	
NR-770HA 2m/440 3/5.5db 40" mobile ant ..	56.95	
NR-770HB Black 2m/440 3/5.5db 40" mobile	59.95	
NR-770HNMO 2m/440 3/5.5db 40" NMO mobile	56.95	
NR-770HBNMO Blk 2m/440 3/5.5db 40" NMO	59.95	
NR-770RA 2m/440 3/5.5db 39" mobile ant ..	51.95	
NR-770SA 2m/440 2.15db 16.5" mobile ant ..	41.95	
NR-790A 2m/440 4.5/7.2db 57" mobile ant ..	82.95	
SG-7000A 2m/440 2.15/3.8db 19" mobile	69.95	
SG-7200NMO 2m/440 3.2/5.7db 38" NMO ant	86.95	
SG-7500A 2m/440 3.5/6db 41" mobile ant ..	79.95	
SG-7500NMO 2m/440 3.5/6db 41" NMO ant ..	79.95	
SG-7900A 2m/440 5/7.6db 62" mobile ant ..	124.95	114 ⁹⁵

TRI-BAND MOBILE ANTENNAS

CR-320A 2m/220/440 2.15/3.8/5.5db 36"	\$89.95	
CR-627B 6m/2m/440 2.15/4.5/7.2db 60" ant	109.95	99 ⁹⁵
CR-627BNMO 6m/2m/440 2.15/4.5/7.2db 60"	109.95	99 ⁹⁵
MV-3A 10/6/2m 57" UHF base mobile ant	84.95	
HVC-7 40m loading coil for MV-3A	39.95	
HVC-14 20m loading coil for MV-3A	37.95	
HVC-18 17m loading coil for MV-3A	37.95	
HVC-21 15m loading coil for MV-3A	27.95	
NR-2000NA 2m/440/1.2 3/6/9.7db 39" N mob	89.95	
SG-9600 6m/2m/440 2.1/2.15/5.2db 33" ant	92.95	
D-505 Mobile 40-1500MHz 20db receive ant	119.95	

MAGNET MOUNTS

DP-SPM/58U Mag mt/RG-58U; 45" max .Dmf	\$39.95	
DPK-4NM-M Hvy mag mt, Yaesu N, 45" max	45.95	
DPK-4NM-N Hvy dig mag mt, cbl, N, 45" max	45.95	
K-702M Hvy duty mag mt, 6 1/2" dia, 50" max	49.95	
MCR-M Mag mt HT base/coax/tilt BNC .Dmf	44.95	39 ⁹⁵
SPM-35 Hvy duty mag mt, cable, 45" max	39.95	
SPM-NMO Hvy dig NMO mag mt, cbl, 45" max	44.95	

TRUNK LIFT MOUNTING KITS

K-200 Folding hatch/trnk mt; NR/SG ants	\$34.95	
K-200KM Folding hatch/trnk mt/coax; NR/SG ..	62.95	
K-400 Hatch/trunk mt; NR/SG antennas	39.95	

DIAMOND - continued

K-400C Hatch/trunk mt w/coax; UHF mount ..	69.95	
K-400CNMO Hatch/trunk mt w/coax; NMO mt ..	69.95	
K-400-3/8C Trunk mount w/6' cable; 3/4-24 ...	69.95	
C-110 10' extension cable for K-400-3/8C	14.95	
K-400N Hatch/trunk mt w/coax & type N	74.95	
K-600M Tilt angle trunk mt w/cable	57.95	
K-600P Tilt angle trunk mt w/cable, Yaesu N ..	64.95	
K-601M SO-239 hideaway trunk mt, 6' coax ..	69.95	
K-601NMO NMO hideaway trunk mt, 6' coax ..	69.95	
C-110 10' extension cable for K-601 mts	14.95	
K-9000LRM Motorized luggage rack mount ..	109.95	
K-9000TM Motorized trunk/hatchback mt	109.95	

GUTTER MOUNTS & KITS

K-300 Folding gutter mt; NR/SG antennas	\$39.95	
K-300C Gutter mt w/cable; UHF mount	69.95	
K-300KM Folding gutter mt w/coax; NR/SG ...	67.95	
K-300M Gutter mt w/coax; NR/SG ants ....Dwf	79.95	39 ⁹⁵

MIRROR & LUGGAGE RACK MOUNTS & KITS

K-540 Mirror/luggage rack mount	\$35.95	
K-540KM Mirror/luggage rack mt w/coax	59.95	
K-550 Luggage mt; new mini vans (use GLP)	44.95	
K-550KM Luggage mt w/SG-239 base/coax ..	69.95	

MOUNTING GROUP HARDWARE

C-101 SO-239 mt, 6.5' RG-316 low-loss coax	\$29.95	
C-101NMO NMO mt, 6.5' RG-316 low-loss coax	29.95	
C-110 10' ext cable; C-101/K-601/K-400-3/8C	14.95	
C-110BNC 10' extension cable to BNC male ..	22.95	
C-211 SO-239 mt, 6.5' coax, 10' coax extend	39.95	
C-213 SO-239 mt, 13.5' RG-316 low-loss coax	37.95	
GLP-5 UHF base mt group hrdwr; mini coax	10.95	
GLP-5N UHF mtg grp hrdwr; mini coax, Yae N	13.95	
GLP-5H UHF base mounting group hardware	10.95	
NMO-UHF Adapter to NMO; not for SG, 45" max	17.95	

MULTIBAND HF BASE VERTICAL ANTENNAS

CP-5 80/40/20/15/10m 200w PEP 15' vert	\$309.95	279 ⁹⁵
CP-6 80/40/20/15/10/6m 200w PEP 15' vert	329.95	299 ⁹⁵

MONO-BAND BASE STATION ANTENNAS

CP-22E 2m 6.5db 9' base antenna	\$59.95	
DP-6H62 6m 6db 21' base antenna	157.95	147 ⁹⁵
F-22A 2m 6.7db 10.5' base antenna	99.95	
F-221 143.5-146.5MHz 6.7db 10.5' base ant	109.95	99 ⁹⁵
F-23A 2m 7.8db 15' base antenna	137.95	127 ⁹⁵
F-23C1 148-154MHz 7.8db 15' comm base ..	183.95	173 ⁹⁵
F-231 143.5-146.5MHz 7.8db 15' base ant ..	172.95	159 ⁹⁵
F-142A 220 MHz 5.5db 6' base antenna	132.95	122 ⁹⁵
F-718A 440 11.5db 15' type N base antenna	229.95	209 ⁹⁵
F-718J 428-442MHz 11.5db 15' N base ant ..	239.95	219 ⁹⁵
F-718AL 420-430MHz 11.5db ATV N base ant	239.95	219 ⁹⁵
F-1230A 1.2GHz 13.5db 10.5' type N base ant	169.95	159 ⁹⁵

DUAL-BAND BASE STATION ANTENNAS

U-200 440/1.2GHz 8.3/11.7db 6' N base ant	\$139.95	129 ⁹⁵
X-50A 2m/440 4.5/7.2db 5.6' base antenna ..	109.95	99 ⁹⁵
X-50NA 2m/440 4.5/7.2db 5.6' base N ant ...	109.95	99 ⁹⁵
X-200A 2m/440 6/8db 8.3' base antenna	149.95	139 ⁹⁵
X-300A 2m/440 6.5/9db 10.2' base ant	174.95	164 ⁹⁵
X-500HNA Hvy duty 2m/440 8.3/11.7db 17.8' N ant	259.95	239 ⁹⁵
X-510MA 2m/440 8.3/11.7db 17.2' base ant	209.95	189 ⁹⁵
X-510NA 2m/440 8.3/11.7db 17.2' type N ant	209.95	189 ⁹⁵
X-510N1 143.5-146.5/428-442MHz 17.2' N ..	219.95	199 ⁹⁵
X-700HNA 2m/440 9.3/13db 24' type N ant ..	439.95	399 ⁹⁵
X-2200A 2m/220 6/7.8db 11.5' base ant	183.95	173 ⁹⁵

TRI-BAND BASE STATION ANTENNAS

D-130J 25-1300 MHz 200w discone ant	\$89.95	
U-5000A 2m/440/1.2GHz 4.5/8.3/11.7db 6' N	149.95	139 ⁹⁵
V-2000A 52-54MHz 2m/440 2.1/6.2/8.4db 8.3'	172.95	162 ⁹⁵
X-3200A 2m/220/440 6/7.8db 10' base	229.95	209 ⁹⁵
X-6000A 2m/440/1.2 6.5/9/10db 10.5' N	219.95	199 ⁹⁵
D-707E Base 40-1500MHz 20db receive ant	179.95	

DUPLEXERS & TRIPLEXERS

MX-37 HF-440/1.2 100/50w N duplexer	\$64.95	
MX-62M HF-6m/2m, 12" cables duplexer	74.95	
MX-72D HF-2m/440 400/150/100w duplexer	43.95	

DIAMOND - continued

MX-72DN As MX-72D/type N on 440 .....Dwfv	52.95	44 ⁹⁵
MX-72H As MX-72D, w/12" cables	46.95	
MX-72N As MX-72D, type N on 440, 12" cables	49.95	
MX-214 2m/220 150/100w w/12" cables	69.95	
MX-214D As MX-214, no cables	69.95	
MX-324 2m/220/440 triplexer	99.95	
MX-324D As MX-324, no cables	99.95	
MX-2000 HF-6m/2m/440 400/400/250w triplexer	84.95	
MX-2000D As MX-2000, no cables	79.95	
MX-3000 HF-2m/440/1.2 400/200/100w triplexer	79.95	
MX-3000D As MX-3000, no cables	79.95	
MX-3000N As MX-3000, type N, 12" cables ..	85.95	

ACCESSORIES

CA-35R DC-500MHz 400w lightning protect .	\$ 29.95	
CX-210A 1.5kw DC-1000MHz coax switch	44.95	
CX-210N 1.5kw DC-1500MHz N coax switch	74.95	
CX-310A HD 3-pos DC-800MHz coax switch	83.95	
DL-30A 15/100w peak 0-500MHz dummy load	27.95	
HB-300 Remote head mount for Xcvt	59.95	
HB-400 HT air vent dash mount	19.95	
HB-450 HT adjustable air vent dash mount ..	54.95	
HB-500 Remote head air vent dash mount ...	22.95	
HB-650 HT door mt; side wind/glv bx .....Dfv	69.95	59 ⁹⁵

Diamond Systems (DSY)

IBM LICENSE COURSE; THEORY/REGULATIONS/CODE		
DSI-IBM-N Novice Class License software	\$ 49.95	39 ⁹⁵
DSI-IBM-T Technician Class License software ..	44.95	34 ⁹⁵
DSI-IBM-NC No Code Tech Class License software ..	59.95	49 ⁹⁵
DSI-IBM-G General Class License software ..	44.95	34 ⁹⁵
DSI-IBM-A Advanced Class License software ..	59.95	49 ⁹⁵
DSI-IBM-E Extra Class License software	59.95	49 ⁹⁵

DIGIMAX (DIG)

B-12 Dry cell holder, switch; D-612 .....Dmwfv	\$ 10.95	4 ⁹⁵
BAC-5 Nicad pack; D-500/D-510A .....Dmwfv	29.95	9 ⁹⁵
BAC-12 Nicad pack; D-612/D-1200 .....Dmwfv	34.95	9 ⁹⁵
RF-500X Inline RF sampler, 250w .....Dwf	39.95	19 ⁹⁵
T-1200 21" BNC telescopic antenna .....Dmwf	8.95	6 ⁹⁵

DRAKE (DRA)

TR-270 25w 2M Fm Xcvt/ps/440 rcvr/TTP	\$599.95	549 ⁹⁵
DEM0D-270 Multimode demodulator kit	99.95	
TNC-270 9600 bps terminal node controller ..	249.95	
R-8B Shortwave receiver	1199.95	
MS-8 1592 Speaker	49.95	
1590 35-55, 108-174 MHz VHF converter	219.95	
7851 R-8A technical manual	39.95	29 ⁹⁵
7852 R-8B technical manual	39.95	
1591 Interface computer soft; orig R-8 Dmwfv	59.00	9 ⁹⁵
SW-8 Shortwave receiver	799.95	
1595 Carrying case for SW-8	49.95	
SW-1 Shortwave receiver	299.95	
SW-2 Shortwave receiver	499.95	
MS-8 1592 Speaker for SW-2	49.95	
1334 Mobile mount kit for SW-1/SW-2	15.95	
1594 Remote control for SW-2	49.95	
2051 Tilt/carry handle for SW-1/SW-2	4.95	

EASY-UP (UPS OK) (EAS)

EZ 48-3ABX 3' boxed tripod w/pitch pad kit .	\$ 24.95	
EZ 48-5ABX 5' boxed tripod w/pitch pad kit .	34.95	

EDCO (EDC)

TX-146 2m 50w 40db 3-stage helical filt Dm	\$ 89.95	29 ⁹⁵
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FORBES GROUP (FOR)

VT-14 2m Ventenna 3' 2.6 db base ant	\$ 49.95	
VT-15S Scanner Ventenna 3' 2.6 db base	49.95	
VT-22 220 Ventenna 25' 2.6 db base ant	49.95	
VT-27 2m/440 Ventenna base antenna	74.95	
VT-44 440 Ventenna 14" 2.6 db base ant	49.95	

Gamber-Johnson (GAM)

SS-100 Super slide mount w/ant plug	\$100.22	69 ⁹⁵
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GAMBER - continued

SS-101 Extra base for SS-100	42.95	
GAP VERTICALS (GAP)		
DX-VIII Challenger 75'/40/20/15/12/10/6/2m 31.5'	\$259.95	
*80m CW w/capacitor exchange from GAP		
Challenger Counterpoise	25.95	
(SYN) 100' 3/4" black double braided rope ..	6.95	
DX-VI Eagle 40/20/17/15/12/10m 21.5' rigid	269.95	
DX-IV Voyager 160/80/40/20m 45'; use 350' guy	399.95	
Voyager Counterpoise	50.95	
(SYN) 350' 3/4" black double braided rope ..	39.95	
Titan DX 80*/40/30/20/17/15/12/10m, 25' ..	299.95	
*80m CW w/capacitor exchange from GAP		
100' Guy Kit with clamp	14.95	
200' Guy Kit with clamp	22.95	
Ground Mount Quick tilt mt for vertical ant .	69.95	
Ladder Mount Quick tilt mt; campers/RVs	69.95	

GARMIN (GAR)

GPS-12XL GPS receiver	\$386.35	269 ⁹⁵
010-10048-00 Mounting bkt; GPS-12XL/38	31.95	
010-10117-01 Carrying case	12.95	
010-10165-00 PC cbl/cig adapt; GPS-12XL	45.95	
010-10084-00 Cig adapter; GPS38 ....Dmwfv	39.95	
010-10164-00 PC cbl/cig adapt; GPS38 Dmwfv	50.95	
GPS-III GPS handheld mapping unit	463.62	299 ⁹⁵
GA-26 Low prof remote ant/cable; GPS-III .	99.98	89 ⁹⁵
010-10082-00 Pwr/data cbl; GPS-12XL/III ..	27.95	
010-10085-00 Cig adapter; GPS-12XL/III ...	23.95	
010-10111-00 Mounting bkt; GPS-III	31.95	
010-10117-00 Carrying case	12.95	Dmwv
010-10117-01 Carrying case	12.95	
010-10141-00 PC interface cable	38.95	
StreetPilot 12 ch GPS receiver	699.99	549 ⁹⁵
010-10199-03 Carrying case	24.95	

GENESYS (GEN)

B-35 2m/440 15" duck	\$ 27.95	9 ⁹⁵
NMO Mount NMO mount w/16" mount	10.95	6 ⁹⁵
QS-110 Spkr/mic; Alinco/icom/Yaesu	29.95	14 ⁹⁵
QS-110K Speaker/mic for Kenwood	29.95	9 ⁹⁵
RS-402 5/20/200w 125-525 SWR/pwr	139.95	79 ⁹⁵
T-05 Throat mic with split plugs	84.95	39 ⁹⁵
T-05K Throat mic for Kenwood	84.95	39 ⁹⁵

GLEN MARTIN (GME)

RT-424 4.5' roof-top tower, 6 sq ft	\$162.95	
RT-832 8' roof-top tower, 8 sq ft	234.95	
RT-936 9' roof-top tower, 18 sq ft	394.95	
RT-1832 17.5' roof-top tower, 12 sq ft	528.95	
LB-3755 Set of 8 3/4" x 5" lag bolts	9.95	
RA-6024 24" side arm for roof tower	41.95	
RA-6048 48" side arm for roof tower	53.95	
M-1330A 30' alum tower 12 sq ft w/Hazer .T	1615.95	
M-1340A 40' alum tower 12 sq ft w/Hazer .T	1832.95	
M-1350A 50' alum tower 12 sq ft w/Hazer .T	2070.95	
M-1840A 40' alum tower 16 sq ft w/Hazer .T	2150.95	
M-1850A 50' alum tower 16 sq ft w/Hazer .T	2410.95	
M-1860A 60' alum tower 15 sq ft w/Hazer .T	3356.95	
M-1870A 70' alum tower 15 sq ft w/Hazer .T	3660.95	
KB-1000 57" side arm; M-13 series	81.95	
KB-1300 57" side arm; M-18 series	83.95	
LR-8400 Lightning rod kit (complete)	89.95	
CW-2540 25' #4 bare copper ground wire ..	19.95	
CW-5040 50' #4 bare copper ground wire ..	39.95	
CW-7540 75' #4 bare copper ground wire ..	58.95	
CW-1040 100' #4 bare copper ground wire ..	66.95	
CW-1240 125' #4 bare copper ground wire ..	97.95	
CW-1540 150' #4 bare copper ground wire ..	117.95	
MC-10 Mast clamp; 2 required	24.95	
M-2280 80' galv steel tower 34 sq ft w/Hazer T	11695.95	
M-2210 100' galv steel tower 31 sq ft w/Hazer T	12995.95	
M-2212 120' galv steel tower 30 sq ft w/Hazer T	14800.95	
ES-40 4" dia x 30" earth screw	19.95	

GLEN MARTIN - continued

ES-60 6" dia x 48" earth screw	35.95	
ES-80 8" dia x 66" earth screw	67.95	
GR-4400 Ground rod wire clamp	6.95	
GR-5080 8' x 3/8" ground rod	20.95	
H-2 175 lb load 12 sq ft HD aluminum Hazer	360.95	
H-3 150 lb load 8 sq ft std aluminum Hazer	273.95	
H-4 200 lb load 16 sq ft galv steel Hazer	348.95	
BW-8001 Brake winch for H-2/3/4	77.95	
HR-2040 Roller bearing set; H-2/3/4	62.95	
HR-6010 T/X plates for H-2/4/5/6	25.95	
HR-6040 Bearing block set; H-5/6	49.95	
HS-1301 Side arm for H-2/3/4/5	64.95	
HP-3000 Kevlar guy cable, 3000# .....per ft	.99	
HP-4500 Kevlar guy cable, 4500# .....per ft	1.49	
HP-7500 Kevlar guy cable, 7500# .....per ft	1.99	
M-1049 9' 1.92" OD galv steel mast	68.95	
MA-1040* 10' 1.92" OD aluminum mast ....T	79.95	
*Truck, freight collect on MA-1040		
MA-1049 9' 1.92" OD aluminum mast	75.95	
MA-1050 9' 1.92" OD aluminum mast	62.95	
MA-2069 9' 2.376" OD aluminum mast	108.95	
MA-5050 5' 1.33" OD aluminum mast	41.95	
ML-1800 Messenger line kit; Glen Martin towers	70.95	
ML-2500 Messenger line kit; Rohn towers ..	74.95	
TB-25 Thrust bearing (2 sealed bearings)	89.95	
TB-3806 3/4" x 6" galv turnbuckle	17.95	
TB-5009 1/2" x 9" galv turnbuckle	23.95	
TB-6212 3/4" x 12" galv turnbuckle	40.95	
TL-0470 Terminal lug	2.95	
VH8-60 Hazer - for 60' Rohn 45G	1410.95	
VH8-70 Hazer - for 70' Rohn 45G	1545.95	
VH9-50 Hazer - for 50' Rohn 55G	1331.95	
VH9-60 Hazer - for 60' Rohn 55G	1455.95	
VH9-70 Hazer - for 70' Rohn 55G	1567.95	

All listed GLEN MARTIN items are shipped PREPAID (except MA-1040) (Glen Martin's expense) direct to you from the factory (48 states). We prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your order. Please allow sufficient delivery time. Most truck lines will not unload towers, so please be sure to have enough manpower and/or equipment on hand.

L.L. GRACE (GRA)

KCT Kansas City Tracker satellite package ...	\$229.95	
KCT/T Kansas City Tracker package/KC Tuner	319.95	

GROVE (GRV)

ANT-20 No-Tenna Inside car rcv ant .Dmwfv	\$ 19.95	6 ⁹⁵
BOK-16 Listener's Lawbook	9.95	
BOK-104 Antenna Factbook	9.95	

GRUNDIG (GRU)

Mini World 100 Mini AM/FM/SW receiver	\$ 49.95	
Traveller II Port AM/FM/SW/LW Rcvr/clock ...	89.95	69 ⁹⁵
Traveller III Digital AM/FM/SW/LW receiver ...	139.95	119 ⁹⁵
Yacht Boy 400 Port AM/FM/SW/LW Rcvr .Dwf	219.95	179 ⁹⁵
G-400ACA AC ps for Yacht Boy 400 .Dmfv	12.95	
Yacht Boy 400PE Port AM/FM/SW/LW Rcvrps ...	249.95	189 ⁹⁵

HAL (HAL)

DSP-4100 HF DSP modem .....special order	1295.00	1099 ⁹⁵
P-38 HF DSP modem	395.00	295 ⁹⁵
ST-8000 HF modem .....special order	3495.00	3269 ⁹⁵

HEIL (HEI)

PRO-SET-4 Deluxe boom mic/headset/HC-4 .	\$131.95	
PRO-SET-5 Deluxe boom mic/headset/HC-5 .	131.95	
PRO-MICRO-4 Boom mic/headset/HC-4	105.95	
PRO-MICRO-5 Boom mic/headset/HC-5	105.95	
PRO-5-4 Boom mic/single headset (HC-4)	120.95	
PRO-5-5 Boom mic/single headset (HC-5) ...	120.95	
AD-1-1 Pro-Set 8-pin adapter cord for Icom	14.99	
AD-1-K Pro-Set 8-pin adapt cord; Kenwood	14.99	
AD-1-T Pro-Set 4-pin adapt cord; Ten-Tec .	14.99	
AD-1-Y Pro-Set 8-pin adapter cord; Yaesu	14.99	

PRICE LIST

HEIL - continued

AD-1-I-M Pro-Set modular adapt cord; lco	14.99
AD-1-K-M Pro-Set modular adapt cord; Ken	14.99
AD-1-Y-M Pro-Set modular adapt cord; Yae	14.99
FS-1 Foot switch	26.95
HS-1 Hand switch	20.95
HC-4 DX'er's 'dream machine' mic element	29.95
HC-5 Mic element for lcom SM-5/SM-6	29.95
HMP In-line microphone preamp; lcom	54.99
HMP-M In-line mic pre/mod plug; IC706/Mkl	54.99
HM-10-4 Microphone with HC-4 element	63.96
HM-10-5 Microphone with HC-5 element	63.96
HM-10-Dual Mic w/HC-4 & HC-5 elements	112.96
CC-1-I HM-10 8-pin cable for lcom	25.99
CC-1-K HM-10 8-pin cable for Kenwood	25.99
CC-1-T HM-10 4-pin cable for Ten-Tec	25.99
CC-1-Y HM-10 8-pin cable for Yaesu	25.99
CC-1-I-M HM-10 modular cable for lcom	25.99
CC-1-K-M HM-10 modular cable; Kenwood	25.99
CC-1-Y-M HM-10 modular cable for Yaesu	25.99
MA-1 Clamp and arm for HM-10	49.99
TB-1 Table base mic stand for HM-10	19.95
Boom Clip for BM-series	5.95
Ear Pads for BM-series	5.95
Ham Radio Handbook	12.95

HUSTLER (HUS)

RM-80 80m CW 400w PEP resonator	\$ 26.95
RM-75 75m phone 400w PEP resonator	26.95
RM-40 40m 400w PEP resonator	24.95
RM-30 30m 400w PEP resonator	24.95
RM-20 20m 400w PEP resonator	21.95
RM-17 17m 400w PEP resonator	21.95
RM-15 15m 400w PEP resonator	15.95
RM-12 12m 400w PEP resonator	15.95
RM-11 11m 400w PEP resonator	15.95
RM-10 10m 400w PEP resonator	15.95
RM-80S 80m CW 2kw PEP resonator	49.95
RM-75S 75m phone 2kw PEP resonator	49.95
RM-40S 40m 2kw PEP resonator	35.95
RM-20S 20m 2kw PEP resonator	28.95
RM-15S 15m 2kw PEP resonator	24.95
RM-11S 11m 2kw PEP resonator	23.95
RM-10S 10m 2kw PEP resonator	23.95
MO-1 54" mast for fender or deck mount	31.95
MO-2 54" mast for bumper mount	31.95
MO-3 54" no break-over mast	23.95
MO-4 22" mast for special applications	19.95
VP-1 Tri-band adapter	5.95
RSS-2 Resonator spring	9.95
QD-2 Stainless quick disconnect	19.95
L-14-144 12' RG-58, PL-259 to lugs	9.95
L-14-240 20' RG-58, PL-259 to lugs	12.95

STAINLESS 2" MOBILE BALL MOUNTS

SSM-1 Ball & spring, cadmium hardware	\$ 46.95
SSM-2 Ball, cadmium hardware	26.95
SSM-3 Stainless steel spring	24.95

1-1/2" MOBILE BALL MOUNTS

C-32 Chrome plated ball	\$ 11.95
C-30 Chrome plated spring	11.95
C-29 Stainless steel spring	17.95
BM-1 Single strap bumper mt w/IC-32	21.95

3/8-24 THREAD MOBILE MOUNTS

HLM Trunk lip mount w/swivel	\$ 22.95
HOT Hustloff trunk lip mt w/swivel	23.95
MBM Super magnet mount w/16' coax	19.95
MM-3 Universal mount with 17' coax	21.95
RVM Recreational vehicle mount	20.95
TGM-1 Trunk groove mount	12.95
TLM Trunk lip mount	21.95

HF ANTENNAS

4-BTV 40/20/15/10m 21' trap vertical	\$166.95	119 ⁹⁵
5-BTV 80/40/20/15/10m 25' trap vertical	211.95	149 ⁹⁵
3D-MTK 30m trap kit for 4-BTV/5-BTV	41.95	

Reg Sale

HUSTLER - continued

6-BTV 80/40/30/20/15/10m 24' trap vert	246.95	179 ⁹⁵
VHF/UHF BASE STATION ANTENNAS		
G6-144B 2m 6 db 10' vertical antenna	\$149.95	114 ⁹⁵
G6-270R 2m/440 6db 7.6' base station ant	209.95	159 ⁹⁵
G7-144 2m 7 db 15' vertical antenna	209.95	159 ⁹⁵
G7-220 220 MHz 7 db 10' vertical antenna	199.95	149 ⁹⁵
G6-440 440 MHz 6 db 7' vertical antenna	186.95	139 ⁹⁵
BUSINESS BAND ANTENNAS		
G7-150-4 7db 167-174 MHz base ant	Δmw	\$229.95
G6-450-1 6db 450-458 MHz base ant	Δmf	209.95
G6-450-4 6db 470-478 MHz base ant	Δmf	209.95
VHF MOBILE ANTENNAS		
BBL-144A 2m FM ¼" hole mt antenna, 3.4db	\$ 39.95	
BBL-144A 2m FM trunk lip mt ant, 3.4 db	47.95	
CG-144 2m FM ¼-24 ant, 7' high, 5.2 db	31.95	
CGT-144 2m FM trunk mt ant, 7' high, 5.2db	51.95	
CG-220 220 FM ¼-24 ant, 5.2 db	31.95	
CGT-220 220 FM 5.2 db tnk mt ant	51.95	
FX-2 2m FM 3.4 db magnetic mt antenna	33.95	
FX-2B 2m FM 3.4 db black mag mt antenna	38.95	
FX-220 220 FM 3.4 db magnetic mt ant	33.95	
FX-220B 220 FM 3.4 db black mag mt ant	38.95	
MKR-2 Radial kit for SF-2/CG-144	20.95	
RX-2 2m FM 3.4db magnetic mount ant	24.95	
RX-220 220 FM 3.4db magnetic mt antenna	24.95	
RX-440 440 FM 5 db magnetic mt antenna	24.95	
SF-2 2m FM ¼-24 ant, 4' high, 3.4 db	14.95	
SF-220 220 MHz ¼-24 antenna, 3 db	14.95	
THF 140-500 MHz ¼ wave trunk mount ant	23.95	
UHF 140-500 MHz ¼ wave BNC mag mt ant	21.95	
UHT-1 140-500 MHz ¼ wave roof mt ant	14.95	

HY-GAIN (HYG)

393S TH5MK2S 5 el, 19' bw/walun	Δm	\$696.43	524 ⁹⁵
390S TH2MK3S 2 el, 6' boom	Δv	337.95	244 ⁹⁵
371S Discoverer 7-1 30 or 40m rotatable dip Δmfv		263.95	199 ⁹⁵
372S Discoverer 7-2 40m 2 el 23' boom	Δm	601.95	454 ⁹⁵
373S Discoverer 7-3 3rd el; 372S, 35' boom Δwf		371.95	279 ⁹⁵
1009AA LP-1009AA 13-30 MHz 12 el LP Δm		1321.95	989 ⁹⁵
189S GRK-88 Ground radial kit	Δmfv	81.95	64 ⁹⁵
190S RRK-88 Roof radial kit	Δmfv	99.95	74 ⁹⁵
191S 160MK-88 160m kit for 188S	Δmfv	178.95	134 ⁹⁵
DX-77 40-10m 750w 7-bnd 29' no radials Δmfv		421.95	319 ⁹⁵
LC-160Q 160m loading coil; 182S	Δmw	71.95	69 ⁹⁵
184 14RMQ Roof kit-12/14VQ, 18AVT	Δwfv	71.95	39 ⁹⁵
380S 2BDQS 80/40m 101' trap doublet	Δf	120.95	89 ⁹⁵
383S 5BDQS 80/40/20/15/10m 94' trap	Δwf	235.95	159 ⁹⁵
381S 19PD 80-10 233' 1-band port dir Δmfv		263.95	199 ⁹⁵
232S 215DX 2m 15 el beam, 28' boom Δmfv		206.95	139 ⁹⁵
231S 70-31DX 430 31 el bm, 24' bm	Δmfv	203.95	149 ⁹⁵
V-6R 6m 3db deluxe base antenna	Δv	189.95	149 ⁹⁵
338 GPG2B 2m ground plane ant	Δmfv	43.95	34 ⁹⁵
331S V-42R 2m/440 type N base ant	Δf	154.95	119 ⁹⁵
335S-1 V-2R 2m ground plane ant	Δf	99.95	74 ⁹⁵
V-3R 220 ground plane antenna	Δmfv	101.95	79 ⁹⁵
337S-1 V-4R 440 ground plane ant	Δmfv	97.95	74 ⁹⁵
216S 216SAT 2m 16el 145.9MHz bm	Δfv	218.95	149 ⁹⁵
218S OSCAR Link Oscar ant system	Δw	487.95	369 ⁹⁵
157S CIC Dipole center insulator/50-239 Δv		23.95	19 ⁹⁵
244S BN-4000D 4kw PEP 160-10 dip bln Δmfv		93.95	69 ⁹⁵
2400-155 62400155 Boom mic/headset Δmfv		113.95	69 ⁹⁵
117 HG-10 10' 2" OD .120 wall steel mast Δw		102.95	39 ⁹⁵
122 HG-COA Coax arm; legs 1'-1 1/8" Δf		23.95	19 ⁹⁵
302-2 CD-45-11 220v medium duty rotor Δmfv		369.95	279 ⁹⁵
51467-10 Lwr mast support; HAM IV/TFX	Δm	81.95	64 ⁹⁵
51472-10 Lwr mast support; CD451V/AR40 Δmfv		28.95	19 ⁹⁵
50559-10 TSP-1 Tower spacing kit	Δmw	23.95	9 ⁹⁵

ICOM (ICO)

IC-781 Xcv/Rcv/pw/tuner/scope	spec order	8000.00	6599 ⁹⁵
FL-103 2.8 KHz 9 MHz IF SSB filter		123.00	109 ⁹⁵
UT-36 Voice synthesizer		74.95	
IC-775DSP Xcvr/pw/kyer/auto tuner/IF-DSP		4300.00	3599 ⁹⁵
CR-282 High stability crystal unit		168.00	149 ⁹⁵

ICOM - continued

FL-53A	250 Hz 455 KHz IF CW filter	245.00	199 ⁹⁵	
FL-101	250 Hz 9 MHz IF CW filter	133.00	119 ⁹⁵	
FL-102	6 KHz 9 MHz IF AM filter	94.95		
FL-222	1.9 KHz 455 KHz IF SSB filter	249.00	199 ⁹⁵	
FL-223	1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵	
FL-232	350 Hz 9 MHz IF CW/RTTY filter	113.00	104 ⁹⁵	
HM-36	Scanning hand mic	74.95		
MB-19	Rack mounting handles	74.95		
SM-6	Desk microphone	128.00	119 ⁹⁵	
SM-8	2-connector desk mic/up/down scan	200.00	169 ⁹⁵	
SM-20	Deluxe desk microphone	259.00	219 ⁹⁵	
SP-20	Speaker w/audio filter	310.00	249 ⁹⁵	
SP-21	External speaker	138.00	119 ⁹⁵	
UT-66	Voice synthesizer	83.95		
IC-756	Xcvr/Rcvr/6m/IF-DSP/tuner/kyer	2445.00	1999 ⁹⁵	
PS-85	Switching power supply	406.00	299 ⁹⁵	
AH-4	80-6m 120w automatic ant tuner	348.00	319 ⁹⁵	
AH-2B	Bumper mt & whip; 40-6m	379.00	299 ⁹⁵	
CR-502	High stability oscillator crystal	95.95		
Suggest dealer installation of CR-502				
FL-52A	500 Hz 455 KHz IF CW filter	245.00	199 ⁹⁵	
FL-53A	250 Hz 455 KHz IF CW filter	245.00	199 ⁹⁵	
FL-100	500 Hz 9 MHz IF CW filter	133.00	119 ⁹⁵	
FL-101	250 Hz 9 MHz IF CW filter	133.00	119 ⁹⁵	
FL-222	1.9 KHz 455 KHz IF SSB filter	249.00	199 ⁹⁵	
FL-223	1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵	
FL-232	350 Hz 9 MHz IF CW/RTTY filter	113.00	104 ⁹⁵	
FL-257	3.3 KHz 455 KHz IF SSB filter	225.00	189 ⁹⁵	
SM-8	2-connector desk mic/up/down scan	200.00	169 ⁹⁵	
SM-20	Deluxe desk microphone	259.00	219 ⁹⁵	
SP-20	Speaker w/audio filter	310.00	249 ⁹⁵	
SP-21	External speaker	138.00	119 ⁹⁵	
UT-102	Voice synthesizer	74.95		
IC-746	Xcvr/Rcvr/6m/2m/IF-DSP/tuner/mic	2228.00	1799 ⁹⁵	
PS-85	Switching power supply	406.00	299 ⁹⁵	
AH-4	80-6m 120w automatic ant tuner	348.00	319 ⁹⁵	
AH-2B	Bumper mt & whip; 40-6m	379.00	299 ⁹⁵	
CR-282	High stability crystal unit	168.00	149 ⁹⁵	
CT-17	CI-V level converter	169.00	139 ⁹⁵	
RS-746	Win remote control software	79.95		
OPC-478	PC to radio connection cable	45.95		
FL-52A	500 Hz 455 KHz IF CW filter	245.00	199 ⁹⁵	
FL-53A	250 Hz 455 KHz IF CW filter	245.00	199 ⁹⁵	
FL-96	2.8 KHz 455 KHz IF SSB filter	190.00	169 ⁹⁵	
FL-100	500 Hz 9 MHz IF CW filter	133.00	119 ⁹⁵	
FL-101	250 Hz 9 MHz IF CW filter	133.00	119 ⁹⁵	
FL-103	2.8 KHz 9 MHz IF SSB filter	123.00	109 ⁹⁵	
FL-222	1.9 KHz 455 KHz IF SSB filter	249.00	199 ⁹⁵	
FL-223	1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵	
FL-232	350 Hz 9 MHz IF CW/RTTY filter	113.00	104 ⁹⁵	
SM-8	2-connector desk mic/up/down scan	200.00	169 ⁹⁵	
SM-20	Deluxe desk microphone	259.00	219 ⁹⁵	
SP-21	External speaker	138.00	119 ⁹⁵	
UT-102	Voice synthesizer	74.95		
CR-64	High stab oscillator xtal; 728	Δmwf	156.00	129 ⁹⁵
MB-49	Mobile mounting bkt; IC-738	Δmw	59.95	49 ⁹⁵
UI-7	AM/FM module for IC-728	Δm	119.00	109 ⁹⁵
IC-707	Xcvr/SW Rcvr w/mic	†	859.00	699 ⁹⁵
PS-85	Switching power supply		406.00	299 ⁹⁵
AH-4	80-6m 120w automatic ant tuner		348.00	319 ⁹⁵
AH-2B	Bumper mt & whip; 40-6m		379.00	299 ⁹⁵
CR-338	High stability crystal unit		81.95	
FL-52A	500 Hz 455 KHz IF CW filter		245.00	199 ⁹⁵
FL-53A	250 Hz 455 KHz IF CW filter		245.00	199 ⁹⁵
MB-5	Mobile mount		59.95	
SM-6	Desk microphone		128.00	119 ⁹⁵
SP-3	External speaker	Δmwv	140.00	119 ⁹⁵
SP-7	Small external speaker		94.95	
SP-20	Speaker w/audio filter		310.00	249 ⁹⁵
SP-21	External speaker		138.00	119 ⁹⁵
UI-9	FM module		113.00	104 ⁹⁵
UT-30	Tone encoder		55.95	
IC-706 Mk II	Mini Xcvr/SW Rcvr w/6 & 2m	†	1356.00	1099 ⁹⁵

UT-106 DSP FREE from Icom 706 Mk II thru 12/31/98!

UT-106 DSP FREE from Icom 706 Mk II thru 12/31/98!

ICOM - continued

	Reg	Sale
PS-85 Switching power supply	406.00	299 ⁹⁵
AH-4 80-6m 120w automatic ant tuner	348.00	319 ⁹⁵
AH-2B Bumper mt & whip; 40-6m	379.00	299 ⁹⁵
AT-180 Auto antenna tuner; HF+6m	749.00	499 ⁹⁵
OPC-598 23' extension cable for AT-180	73.95	
CR-502 High stability oscillator crystal	95.95	
Suggest dealer installation of CR-502		
FL-100 500 Hz 9 MHz IF CW filter	133.00	119 ⁹⁵
FL-101 250 Hz 9 MHz IF CW filter	133.00	119 ⁹⁵
FL-103 2.8 KHz 9 MHz IF SSB filter	123.00	109 ⁹⁵
FL-223 1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵
FL-232 350 Hz 9 MHz IF CW/RTTY filter	113.00	104 ⁹⁵
HM-77A TTP microphone	151.00	139 ⁹⁵
MB-62 Mounting bracket for main unit	25.95	
MB-63 Mounting bracket for control panel	18.95	
MB-65 Mounting base platform	35.95	
OPC-581 11.5' separation cable	60.95	
OPC-587 16' separation cable	79.95	
OPC-589 8-pin to jack adapter	35.95	
OPC-599 7+8-pin to 13-pin adapter	60.95	
SM-8 2-connector desk mic/up/down scan	200.00	169 ⁹⁵
SM-20 Deluxe desk microphone	259.00	219 ⁹⁵
SP-7 Small external speaker	94.95	
UT-86 Tone squelch; IC-706 Mk II only	69.95	
UT-102 Voice synthesizer	74.95	
UT-106 Plug-in DSP unit; IC-706 Mk II only	166.00	149 ⁹⁵
AH-710 1.9-30 MHz 80' folded dipole	360.00	299 ⁹⁵
PW-1 160-6m linear amplifier/ps/tuner	5995.00	4999 ⁹⁵

SHORTWAVE RECEIVERS

R-1* .1MHz-1.3GHz AM/FM handheld Rcvr Dm	\$650.00	399 ⁹⁵
HP-4 Lightweight headphones	29.95	
Note: R-1/R-1-15 use 'W'-series HT accessories		
R-10-05 .5M-1.3G AM/FM/SSB hand/cell bkld	641.00	359 ⁹⁵
CS-R10 & OPC-478 FREE direct from Icom thru 12/31/98!		
R-10-15* .5MHz-1.3GHz AM/FM/SSB HH Rcvr	503.00	359 ⁹⁵
CS-R10 & OPC-478 FREE direct from Icom thru 12/31/98!		
CP-12L Right angle cig cable w/filter	36.95	
CS-R10 DOS programming software; R-10	13.95	
OPC-474 Cloning cable (R-10 to R-10)	18.95	
OPC-478 PC - radio programming cable	45.95	
CSW-R10 Windows prog soft/cable; R-10	50.95	
CT-17 CI-V level converter	169.00	149 ⁹⁵
HP-4 Lightweight headphones	29.95	
LC-140 Carrying case for R-10	38.95	
OPC-254L Right angle mini DC pwr cable	14.95	
SP-13 Earphone	4.95	
FL-32A 500 Hz CW filter; R-71A	126.00	99 ⁹⁵
FL-32A 250 Hz CW filter; R-71A	121.00	99 ⁹⁵
UI-8 FM antenna; R-72A	119.00	69 ⁹⁵
R-100* .1MHz-1.856GHz AM/FM 12v Rcvr	1008.00	849 ⁹⁵
R-100-11 .1MHz-1.856GHz am/fm 12v/cell bkld	1008.00	849 ⁹⁵
AH-7000 25-1000 MHz discone ant w/coax	206.00	179 ⁹⁵
CP-11 Cig cord w/noise filter	40.95	34 ⁹⁵
HP-4 Lightweight headphones	29.95	
PCR-1000 5-1300 PC control Rcv/clbk bld	629.00	399 ⁹⁵
PerCon Spectrum FREE direct from Icom thru 12/31/98!		
PCR-1000-03/07* 5-1300 PC controlled Rcvr	629.00	399 ⁹⁵
PerCon Spectrum FREE direct from Icom thru 12/31/98!		
UT-106 Plug-in DSP unit; PCR-1000	166.00	149 ⁹⁵
R-7000* 25 MHz-2 GHz scanning receiver Dm	1667.00	1269 ⁹⁵
AH-7000 25-1000 MHz discone ant w/coax	206.00	179 ⁹⁵
CK-70 (EX-299) 12v DC option	41.95	39 ⁹⁵
MB-12 Mobile mount	59.95	
R-8500 .1MHz - 2GHz receiver/cell blocked	2588.00	1519 ⁹⁵
R-8500-03* .1MHz - 2GHz receiver	2156.00	1519 ⁹⁵
AH-7000 25-1000 MHz discone ant w/coax	206.00	179 ⁹⁵
CR-293 High stability xtal unit	380.00	329 ⁹⁵
FL-52A 500 Hz CW filter	245.00	199 ⁹⁵
MB-12 Mobile mount	59.95	
RS-R8500 PC control soft w/RS-232 cable	52.95	
SP-7 Small external speaker	94.95	
SP-21 External speaker	138.00	119 ⁹⁵
TV-R7100 TV/FM adapter; R-8500/R-7100	426.00	369 ⁹⁵
UT-102 Voice synthesizer	74.95	

ICOM - continued

	Reg	Sale
R-9000* .1-1999.8MHz Rcvr/spec scope	6579.00	5399 ⁹⁵
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵
UT-36 Voice synthesizer	74.95	
*United States & state government agencies or a political subdivision thereof and communications utility companies and their legal agents ONLY may purchase unblocked models of R-1/R-10/R-100/PCR-1000/R-7000/R-8500 and/or R-9000 for official government or communications utility company use only. Mail or FAX purchase order to AES. Exports: inquire.		
2m TRANSCEIVERS		
UT-101 DTMF unit for IC-2000H	Δmfv	\$ 28.95
IC-2100H 55w 2m FM Xcvr/TTP mic	†	244.00 199 ⁹⁵
BC-96 Microphone holder		43.95
CP-13L Cig cable w/filter for BC-96		40.95
OPC-288L DC power cable for BC-96		19.95
CS-2100 DOS cloning software		13.95
OPC-478 PC to radio cloning cable		45.95
CSW-MOB Win prog soft w/cable; 2100H		50.95
EX-1513 Infrared sub receiver		28.95
EX-1759 Infrared receiver		110.95 99 ⁹⁵
HM-90A Wireless microphone	Δmwf	209.00 159 ⁹⁵
HS-62 Flexible mobile mic		70.95
MB-17A Quick release bracket		49.95
OPC-347 23' DC power cable		46.95
OPC-440 Mic extension cable		85.95
OPC-441 Speaker extension cable		33.95
OPC-474 Radio to radio cloning cable		18.95
OPC-589 8-pin to jack adapter		35.95
OPC-647 8.2' mic extension cable		54.95
UT-67 Tone squelch unit	Δmwf	124.00 59 ⁹⁵
UT-85 Tone squelch unit	Δmwf	76.95 69 ⁹⁵
IC-281H 50w 2m FM Xcvr/TTP/9600	Δw	513.00 299 ⁹⁵
IC-207H 45w 2m/35w 440 FM Xcvr/TTP mic		453.00 379 ⁹⁵
BC-96 Microphone holder		43.95
CP-13L Cig cable w/filter for BC-96		40.95
OPC-288L DC power cable for BC-96		19.95
CS-207 DOS prog software; IC-207H		13.95
OPC-646 Cloning cable		89.95
CSW-MOB Win prog soft w/cable; 207H		50.95
EX-1759 Infrared receiver		110.95 99 ⁹⁵
HM-90A Wireless microphone	Δmwf	209.00 159 ⁹⁵
HS-62 Flexible mobile mic		70.95
MB-58 Remote controller bracket		39.95
OPC-347 23' DC power cable		46.95
OPC-440 Mic extension cable		85.95
OPC-441 Speaker extension cable		33.95
OPC-589 8-pin to jack adapter		35.95
OPC-600 11.5' separation kit		45.95
OPC-601 23' separation kit		60.95
OPC-647 8.2' mic extension cable		54.95
OPC-439 23' separation kit; IC-2700H	Δmfv	60.95 49 ⁹⁵
UT-89 Tone scan/decode unit; IC-2350H		110.00 99 ⁹⁵
IC-2710H 50w 2m/35w 440 FM Xcvr/TTP		560.00 469 ⁹⁵
BC-96 Microphone holder		43.95
CP-13 Cig cable w/filter for BC-96		40.95
OPC-288 DC power cable for BC-96		19.95
CS-2710 DOS prog software; IC-2710H		13.95
OPC-646 Cloning cable		89.95
CSW-MOB Win prog soft w/cable; 2710H		50.95
EX-1513 Infrared sub receiver		28.95
EX-1759 Infrared receiver		110.00 99 ⁹⁵
HM-90A Wireless microphone	Δmwf	209.00 159 ⁹⁵
HS-62 Flexible mobile mic		70.95
MB-58 Remote controller bracket		39.95
MB-65 Mounting base platform		35.95
OPC-347 23' DC power cable		46.95
OPC-440 Mic extension cable		85.95
OPC-441 Speaker extension cable		33.95
OPC-589 8-pin to jack adapter		35.95
OPC-600 11.5' separation kit		45.95
OPC-601 23' separation kit		60.95
OPC-647 8.2' mic extension cable		54.95
UT-49 DTMF decoder unit		74.95

ICOM - continued

	Reg	Sale
UT-104 Tone squelch unit		39.95
IC-821H 2m/430 SSB/FM sat Xcvr/9600/mic		1695.00 1399 ⁹⁵
PS-85 Switching power supply		406.00 299 ⁹⁵
AG-25 2m mast mounted GasFET preamp		220.00 189 ⁹⁵
AG-35 430 MHz mast mounted preamp		228.00 199 ⁹⁵
CR-293 High stability xtal unit		380.00 329 ⁹⁵
FL-132 500 Hz main receiver CW filter		133.00 119 ⁹⁵
FL-133 500 Hz sub band receiver CW filter		133.00 119 ⁹⁵
HM-12 Scan hand microphone		74.95
MB-5 Mobile mount		59.95
SM-6 Desk microphone		128.00 119 ⁹⁵
SP-7 Small external speaker		94.95
SP-20 Speaker w/audio filter		310.00 249 ⁹⁵
SP-21 External speaker		138.00 119 ⁹⁵
UT-36 Voice synthesizer; 820H		74.95
UT-50 Tone decoder		74.95
UT-84 Tone squelch unit; 821H		110.00 99 ⁹⁵
UT-102 Voice synthesizer; 821H		74.95
MB-50 Rem controller bkt; Delta100H .Δmwf		29.95 19 ⁹⁵
OPC-332 11.5' sep kit; Delta100H .Δmwf		30.95 19 ⁹⁵
OPC-333 23' sep kit; Delta100H .Δmwf		38.95 29 ⁹⁵
OPC-335 16.4' spkr cbl; Delta100H .Δmwf		40.95 24 ⁹⁵
UT-75 DTMF decoder unit; Delta100H .Δf		69.95 49 ⁹⁵
UT-76 Tone squelch unit; Delta100H .Δmwf		165.00 99 ⁹⁵
Accessories for IC-2AT		
AD-12 Ext pwr adaptor; 2/4GAT/32AT .Δwv	\$	43.95 29 ⁹⁵
BC-16U/BM112U Wall cgr; 5A/7/8 only .Δmwv		32.95 29 ⁹⁵
BC-25U Extra wall cgr; BP-3 only .Δmwv		35.95 29 ⁹⁵
BC-35 Drop-in rapid charger .Δmfv		150.00 119 ⁹⁵
BP-2 425ma 7.2v long life battery .Δmwv		85.95 59 ⁹⁵
BP-3 250ma 8.4v battery .Δm		65.95 49 ⁹⁵
BP-5 425ma 10.8v high power battery .Δm		109.00 79 ⁹⁵
BP-5A 425ma 10.8v direct charge batt .Δmwv		109.00 79 ⁹⁵
BP-7 425ma 13.5v 5w battery .Δmf		121.00 99 ⁹⁵
BP-8 800ma 8.4v long life battery .Δm		120.00 89 ⁹⁵
BP-70 270ma 13.2v batt; 2GAT/32AT .Δm		113.00 79 ⁹⁵
CP-1 Cig cgr; BP-3/7/8/DC cord .Δmwf		26.95 19 ⁹⁵
CP-10 Battery separation cable/clip .Δmwf		51.00 14 ⁹⁵
CP-11 Cig cord w/noise filter .Δmwf		40.95 34 ⁹⁵
DC-1 DC operation module .Δmwf		40.95 34 ⁹⁵
FA-2 Extra 2m flexible antenna .Δmf		29.95 19 ⁹⁵
HH-5S Handheld shoulder strap .Δwf		29.00 9 ⁹⁵
HM-9 Speaker/mic .Δmwf		59.95 49 ⁹⁵
MB-16 Window/car door mount .Δmwf		40.00 9 ⁹⁵
MB-16D Mobile mtg bkt for HT .Δmw		40.00 9 ⁹⁵
Accessories for IC-21A		
AD-26 Batt pack adapt; rapid cgr .Δmwf	\$	18.00 6 ⁹⁵
BP-120 AA alkaline battery case .Δf		35.95 24 ⁹⁵
HM-9L Speaker/mic .Δmwf		59.00 19 ⁹⁵
LC-83 Vinyl case for BP-121 .Δf		35.00 4 ⁹⁵
LC-85 Vinyl case for BP-123/124 .Δf		35.00 4 ⁹⁵
IC-T2H 6w 2m FM HT/8 AA nicads/cgr		194.00 169 ⁹⁵
AD-81 Adapter for BC-119-11		17.95
BC-119-11 Desk charger (adapter required)		103.00 94 ⁹⁵
BP-194 AA alkaline battery case		18.95
BP-195 9.6v 700ma nicad battery		42.95
BP-196 9.6v 1050ma nicad battery		53.95
CP-12L Rt angle cig charge cable w/filter		36.95
CS-T2 DOS prog software for IC-T2		13.95
OPC-474 Cloning cable (T2 to T2)		18.95
OPC-478 PC to radio cloning cbl; T2		45.95
CSW-HH4 Win prog soft w/cable; T2		50.95
HM-46 Slim-line speaker/mic		45.95
HM-54 Hvy duty spkr/mic		83.95
HM-75A Remote control microphone		70.95
HS-51 Headset w/VOX		96.95
LC-145 Carrying case for IC-T2		38.95
OPC-254L Right angle mini DC chg cable		14.95
SP-13 Earphone		4.95
LC-123 Vinyl case; Z1A; BP170/171/2 .Δmwf		38.95 9 ⁹⁵
UT-93 Tone squelch; early IC-Z1A .Δwf		83.00 19 ⁹⁵
IC-T22A 2m FM HT/batt/cgr/TTP		283.00 239 ⁹⁵
IC-T7A/HP 4w 2m/440 HT/batt/cgr/TTP		303.00 259 ⁹⁵

PRICE LIST

ICOM - continued

IC-W32A 5w 2m/440 FM HT/batt/cgr/TPP/tone	365.00	309 ⁹⁵
AD-51 Batt pack adapter; W32A	14.95	
AD-56 Batt pack adapter; T22A/T7A	18.95	
BC-119-11 Desk charger (adapter required)	103.00	94 ⁹⁵
BC-74/BC-110A Extra wall cgr; BP-111-114	40.95	
BP-170 Battery case	35.95	
BP-171 4.8v 700ma battery	83.00	49 ⁹⁵
BP-172 4.8v 900ma battery	91.95	
BP-173 9.6v 600ma battery	150.00	139 ⁹⁵
BP-180 7.2v 600ma battery	83.95	
CP-12 Cig lighter cable w/filter	36.95	
CP-12L Right angle cig cable w/filter	36.95	
CS-17 DOS prog software for IC-T7A	13.95	
CSW-32 DOS prog software for IC-W32A	13.95	
OPC-474 Cloning cbl (T7/32A to T7/32A)	18.95	
OPC-478 PC to radio cloning cbl; T7A/W32A	45.95	
CSW-HH4 Win prog soft/cbl; W32A/T7A	50.95	
FA-1443B Extra 2m/440 dual band flex ant	29.95	
HM-46 Slim-line speaker/mic	45.95	
HM-46L Slim-line spkr/mic, rt angle plug	59.95	
HM-54 Hvy duty spkr/mic	83.95	
HM-75A Remote control microphone	70.95	
HS-10 Boom mic/headset	69.95	
HS-10SA VOX unit	69.95	
HS-10SB PTT switchbox	69.95	
HS-85 Headset	89.95	
LC-125 Vinyl case; T22A w/BP170/171/172	38.95	
LC-126 Vinyl case; T22A w/BP173	38.95	
LC-128 Vinyl case; IC-W32A	38.95	
LC-136 Vinyl case; T7A w/BP170/171/172	38.95	
LC-137 Vinyl case; T7A w/BP173/180	38.95	
MB-30 Mobile/wall bracket	41.95	
NCP-1 Nylon chest pack	44.95	39 ⁹⁵
OPC-254 Mini DC power cable	14.95	
OPC-254L Right angle mini DC pwr cable	14.95	
SP-13 Earphone	4.95	
UT-94 Tone squelch unit; T22A	55.95	
IC-Q7ABC 300mw 2m/440 FM HT/batts/cgr	239.00	199 ⁹⁵
BC-127A Nicad charger; original IC-Q7A	20.95	
HM-46 Slim-line speaker/mic	45.95	
HS-85 Headset	89.95	
SP-13 Earphone	4.95	
OPC-782 Plug adapt cbl; HM46/HS85/SP13	16.95	
LC-146 Carrying case	38.95	
IC-T8A/HP 5w 6m/2m/440 HT/BP200/cgr/TPP	419.00	349 ⁹⁵
AD-87 Batt pack adapter for rapid charger	8.95	
BC-127A Nicad charger; original IC-Q7A	29.95	
BC-119-31 Desk charger (adapter required)	107.00	99 ⁹⁵
BP-197 3 AA battery case	24.95	
BP-198 4.8v 700ma NiMH battery	59.95	
BP-199 6v 700ma NiMH battery	70.95	
BP-200 9.6v 680ma NiMH battery	85.95	
CP-12L Right angle cig cable w/filter	36.95	
CS-T8K DOS prog software w/cable; IC-T8A	58.95	
OPC-478 Cloning cable (T8A to T8A)	18.95	
CSW-HH4 Win prog soft w/cable; T8A	50.95	
HM-46 Slim-line speaker/mic	45.95	
HM-54 Hvy duty spkr/mic	83.95	
HM-75A Remote control microphone	70.95	
HS-51 Headset w/VOX	96.95	
LC-147 Leather carrying case	24.95	
OPC-254L Right angle mini DC pwr cable	14.95	
SP-13 Earphone	4.95	
BP-130 Battery case; W21AT	35.95	29 ⁹⁵
BP-131 900ma 7.2v batt/mic; W21AT	133.00	69 ⁹⁵
BP-132 600ma 12v batt/mic; W21AT	150.00	79 ⁹⁵
HM-75 Spkr/mic w/rem cont; W21AT	96.95	59 ⁹⁵

Accessories for IC-2SAT/2SRA/24AT/W2A

AD-14 BC-74 charge adapter	43.95	29 ⁹⁵
AH-20 Replacement rcv ant; IC-2SRA	28.95	19 ⁹⁵
BA-12 Drop-in charger adapter	29.95	19 ⁹⁵
BC-74/BC-110A Wall cgr; BP-111-114	40.95	34 ⁹⁵
BP-82 7.2v 300ma battery	83.00	49 ⁹⁵
BP-83 7.2v 600ma battery	90.95	69 ⁹⁵

ICOM - continued

BP-84 7.2v 1000ma battery	120.00	89 ⁹⁵
BP-90 AA alkaline battery case	35.95	29 ⁹⁵
MB-22 Alligator belt/pocket clip	15.95	9 ⁹⁵
MB-25 Stainless wall storage unit	41.00	19 ⁹⁵
IC-26XAT/HP 7w 2m HT/batt/cgr/TPP	274.00	229 ⁹⁵
AD-25 Battery charger adapter	63.95	
AD-28 Batt pack adapter for rapid charger	18.95	
BC-119-11 Desk charger (adapter required)	103.00	94 ⁹⁵
BC-77/BC-105A Extra wall charger	40.95	
BP-130A Battery case	35.00	24 ⁹⁵
BP-132A 600ma 12v battery/mic	150.00	89 ⁹⁵
BP-157A 900ma 7.2v battery	85.95	
BP-160 700ma 7.2v battery	66.00	39 ⁹⁵
BP-174 600ma 12v battery	98.95	
CP-13 Cig cable w/filter	40.95	
CP-13L Right angle cig cable w/filter	40.95	
HM-46 Slim-line speaker/mic	45.95	
HM-46L Slim-line spkr/mic, rt angle plug	59.95	
HM-54 Heavy duty spkr/mic	83.95	
HM-55A Speaker/mic w/TPP	159.00	79 ⁹⁵
HS-51 Headset w/VOX	96.95	
LC-116 Carrying case; BP-130A/157A/160	38.95	
LC-117 Carrying case for BP-132A	38.95	
MB-30 Mobile/wall bracket	41.95	
OPC-288 Mini DC power cable	19.95	
OPC-288L Right angle mini DC pwr cable	19.95	
SP-13 Earphone	4.95	
UT-49 DTMF decoder unit	74.95	
AD-22 External batt chg adapt; D1A	50.95	24 ⁹⁵
AD-27 Batt pack adapt; rapid cgr; D1A	14.95	12 ⁹⁵
BP-101 700ma 7.2v batt; Delta-1A	94.00	49 ⁹⁵
LC-82 Vinyl case; Delta-1A w/BP-103	35.95	19 ⁹⁵
UT-70 Tone encoder/decoder; D1A	200.00	99 ⁹⁵
AD-44 Batt adapt; rapid cgr; T21A	18.95	6 ⁹⁵
LC-109 Vinyl case; BP151/159; T21A	38.95	24 ⁹⁵
LC-110 Vinyl case; BP-153; IC-T21A	38.00	9 ⁹⁵
LC-111 Vinyl case; BP-152; IC-T21A	38.95	19 ⁹⁵
RP-1520 25w 2m FM repeater/ps .spec order	3025.00	2499 ⁹⁵
RP-1520 requires Icom service dept. set-up; \$72 minimum		

430/440 MHz & 1.2 GHz EQUIPMENT

RP-4020/50w 50w 440 repeater/ps spec order	3200.00	2649 ⁹⁵
RP-4020 requires service dept. set-up; \$72 minimum		
MB-21 Bracket; IC-901 controller unit	26.00	6 ⁹⁵
RP-1220 1.2 GHz FM repeater/ps .spec order	3450.00	2849 ⁹⁵
RP-1220 requires Icom service dept. set-up; \$72 minimum		
AG-1200 1.2 GHz mast mt preamp	189.00	169 ⁹⁵

ACCESSORIES

CT-16 Satellite interface unit	\$160.00	144 ⁹⁵
CT-17 CI-V level converter	169.00	139 ⁹⁵
HM-12 Scan hand microphone	74.95	
HM-14 Scan/TPP microphone	113.00	99 ⁹⁵
HM-56A Autodial TTP mic	173.00	149 ⁹⁵
MB-23 Side mount carrying handle	15.95	
OPC-118 Adapt; AT500; 725/735/765/781 Dmw	25.95	
OPC-137 24-pin adaptor cable; all base	25.95	
PS-85 Power supply	406.00	299 ⁹⁵
SM-6 Electret desk microphone	128.00	119 ⁹⁵
SM-8 2-connector desk mic w/up/down scan	200.00	169 ⁹⁵
SM-20 Deluxe desk microphone	259.00	219 ⁹⁵
SP-5 Mobile speaker	54.95	
SP-7 Small external speaker	94.95	
SP-10 Slim-line external speaker	69.95	
SP-12 Slim-line speaker w/visor clip	44.95	
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵
UT-34 Tone squelch unit	94.95	69 ⁹⁵

IDIOM PRESS (IDI)

K-3 Logikey CW keyer	\$129.95	119 ⁹⁵
HK-3 Hook-up kit	10.95	

INTERFLEX (INT)

dspGOLD Software for AEA DSP-2232	f	\$129.95
KaGOLD DualPort Software for KPC/KAM	f	79.95
KaGOLD DualPort w/Pactor Soft; KPC/KAM	f	99.95

INTERFLEX - continued

PkGOLD w/Pactor Software for PK-232MBX f	99.95	
PkGOLD/900 Software for PK-900	f	129.95

International Ant (IAC)

160m double Bazooka 248' antenna	\$195.95	
80m double Bazooka 121' antenna	135.95	
40m double Bazooka 64' antenna	115.95	

JPS (JPS)

ANC-4 Antenna noise canceller	\$195.00	189 ⁹⁵
NF-60 Auto DSP audio spectral notch filt	160.00	109 ⁹⁵
NIR-10 Dlx noise/notch DSP bandpass filt Dmwfv	299.95	189 ⁹⁵
NIR-12 Dual DSP noise reduction/filter unit	375.00	349 ⁹⁵
Power Pack 115vac/12vdc adapter	16.95	
SDK-12 Software development kit; NIR-12	35.95	
NRF-7 Noise reducer and filter unit	219.95	159 ⁹⁵
Power Pack 115vac/12vdc adapter	16.95	

JSC (JSC)

JRR-520 5-wire rotor cable	146	
JRR-520	125	
JRR-520	44	
JRR-520	79	

K-COM (KCO)

RF-1 Modular telephone 3-30 MHz RFI filter	\$ 16.95	
RF-1/Low Modular phone .5-3 MHz RFI filter	16.95	
RF-1/2-line 2-line modular 3-30 MHz RFI filt	22.95	
RF-1/coiled Coiled cord modular 3-30MHz filt	22.95	
RF-2 Hard-wired telephone 3-30 MHz RFI filt	10.95	

KLM (KLM)

ANTENNAS

160V 160, 80 or 40m vertical, 24' high	* \$300.00	259 ⁹⁵
80M-1 80m rotatable dipole, 90' long	*T 980.00	849 ⁹⁵
80M-1R 80m rotatable dipole w/relays	*T 1387.00	1199 ⁹⁵
80M-2 80m 2 el beam, 36' boom, 4 db	*T 3251.00	2799 ⁹⁵
80M-2R 80m 2 el beam w/relays	*T 4154.00	3579 ⁹⁵
80M-3 80m 3 el beam, 60' boom, 7 db	*T 5416.00	4669 ⁹⁵
80M-3R 80m 3 el beam w/relays	*T 7043.00	6069 ⁹⁵
SSV-80-40-15 80/40/15m vert, 65' high	*T 966.00	839 ⁹⁵
6-12-8LPA 6-12 MHz 8el LP 36' boom	*T 2465.00	2129 ⁹⁵
Heavy duty boom only for 6-12-8LPA	*T 540.00	469 ⁹⁵
6-12-8LPA w/Heavy duty boom	*T 2865.00	2469 ⁹⁵
6-30-15LPA 6-30 MHz 15el LP, 46' boom	*T 4078.00	3519 ⁹⁵
7.2/10-30-LPA 7, 10-30MHz 8 el, 42' bm	*T 1459.00	1259 ⁹⁵
Heavy duty boom only for 7.2/10-30-LPA	*T 499.00	429 ⁹⁵
7.2/10-30-LPA w/Heavy duty boom	*T 1921.00	1659 ⁹⁵
40M-1B 40m rotatable dipole, 46.5' bm	* \$ 261.00	229 ⁹⁵
40M-2B 40m 2 el beam, 16' boom, 4.9 db	* \$ 638.00	549 ⁹⁵
40M-3B 40m 3 el beam, 32' boom, 6.5 db	* \$ 911.00	789 ⁹⁵
Heavy duty boom only for 40M-3B	*T 367.00	319 ⁹⁵
40M-3B w/Heavy duty boom	*T 1214.00	1049 ⁹⁵
40M-4B 40m 4 el beam, 42' boom, 7.2 db	* \$ 1213.00	1049 ⁹⁵
Heavy duty boom only for 40M-4B	*T 499.00	429 ⁹⁵
40M-4B w/Heavy duty boom	*T 1716.00	1479 ⁹⁵
40-10V 40/20/15/10m 26.5' vertical	*T 373.00	249 ⁹⁵
10-30-7LPA 10-30MHz 7el LP 30' bm, 7db	*T 1043.00	899 ⁹⁵
Heavy duty boom only for 10-30-7LPA	*T 473.00	409 ⁹⁵
10-30-7LPA w/Heavy duty boom	*T 1577.00	1359 ⁹⁵
SK-8 Conv kit for 10-30 log w/o 40m dipole	* \$ 333.00	289 ⁹⁵
SK-8/40M Conv kit for 10-30 log w/40m dipole	* \$ 502.00	439 ⁹⁵
KT-31 20-15-10m 24.5' rotatable dipole	* \$ 317.00	289 ⁹⁵
KT-34A 20-15-10m, 4 el, 16' boom, 7 db	* \$ 624.00	539 ⁹⁵
KT-34 Upgrade kit - KT-34A to XA	* \$ 354.00	299 ⁹⁵
KT-34XA 20-15-10m, 6 el, 32' boom, 9 db	* \$ 838.00	739 ⁹⁵
Heavy duty boom only for KT-34XA	*T 376.00	329 ⁹⁵
KT-34XA w/Heavy duty boom	*T 1206.00	1039 ⁹⁵
30M-2 30m 2 el beam	* \$ 520.00	449 ⁹⁵
30M-3 30m 3 el beam	* \$ 754.00	649 ⁹⁵
20M-4 20m 4 el beam, 21' boom, 7.7 db	* \$ 541.00	469 ⁹⁵
20M-5 20m 5 el beam, 42' boom, 9.7 db	*T 837.00	729 ⁹⁵
Heavy duty boom only for 20M-5	*T 499.00	429 ⁹⁵
20M-5 w/Heavy duty boom	*T 1248.00	1079 ⁹⁵
20M-6 20m 6 el beam, 57' boom, 11 db	*T 1206.00	1039 ⁹⁵

KLM - continued

	Reg	Sale
Heavy duty boom only for 20M-6	*T	659.00 569 ⁹⁵
20M-6 w/heavy duty boom		1750.00 1499 ⁹⁵
20M-6 17m 3el beam, 17.5' bm, 6.5db	*T	443.00 389 ⁹⁵
15M-4 15m 4 el beam, 14' boom, 7.7db	*T	287.00 243.00
15M-6 15m 6 el beam, 36' boom, 10.5db	*T	679.00 589 ⁹⁵
Heavy duty boom only for 15M-6	*T	406.00 349 ⁹⁵
15M-6 w/heavy duty boom		989.00 859 ⁹⁵
15M-6LD As 15M-6, but light duty		527.00 459 ⁹⁵
12-17-30 WARC tri-band dipole		317.00 279 ⁹⁵
12-17-30V WARC tri-band vertical		166.00 149 ⁹⁵
10M-4 10m 4 el beam, 10' bm, 7.7 db		263.00 239 ⁹⁵
10M-6 10m 6 el beam, 26.5' boom, 11 db		415.00 369 ⁹⁵
IV-10 10m 26' vertical antenna		122.00 109 ⁹⁵

Note: All KLM antennas supplied with a KLM balun/matching system, which is included in the price.

6M-5 6m 5 el beam, 11.75' boom, 9.7 db	261.00	229 ⁹⁵
6M-7LB 6m 7el, 25.75' bm, 11.5db	381.00	349 ⁹⁵
6M-7LD 6m 7 el beam, 20' bm, 10.5 db	298.00	269 ⁹⁵
6M-10 6m 10 el beam, 34' boom, 11.7 db	542.00	469 ⁹⁵
6M-14 6m 14 el beam, 61' boom, 14 db	754.00	649 ⁹⁵
IV-6 6m 15' vertical antenna, 3 db	129.00	119 ⁹⁵
2M-4X 2m 4 el rear mt beam, 4.2' bm, 8.5db	81.00	74 ⁹⁵
2M-7X 2m 7 el beam, 8.75' boom, 10.3 db	91.00	84 ⁹⁵
2M-10X 2m 10 el beam, 15' boom, 12.5 db	104.00	94 ⁹⁵
2M-11X 2m 11 el beam, 15.33' bm, 12.5 db	108.00	99 ⁹⁵
2M-12X 2m 12 el beam, 21' beam, 13.4 db	116.00	106 ⁹⁵
2M-13LBA 2m 13 el beam, 21.5' bm, 13.3db	125.00	114 ⁹⁵
2M-14C 2m circ 14 el beam, 12.9'bm, 11db/CS3	211.00	179 ⁹⁵
2M-14CM 2m circ 14 el beam, no switcher	169.00	139 ⁹⁵
2M-15X 2m 15 el beam, 28' boom, 14.8 db	215.00	189 ⁹⁵
2M-16LBM 2m 16 el beam, 28' boom, 14.5db	244.00	199 ⁹⁵
2M-20LXB 2m 20 el beam, 38.5' boom	316.00	269 ⁹⁵
2M-22C 2m circ 22el beam, 19'bm, 13db/CS3	265.00	229 ⁹⁵
2M-22CM 2m circ 22 el beam, no switcher	237.00	199 ⁹⁵
IV-2 2m 5' vertical antenna, 3 db	131.00	49 ⁹⁵
IV-2X 2m 11' vertical antenna, 5 db	181.00	79 ⁹⁵
220-7 220 7 el beam, 4.75' bm, 8.8 db	98.00	89 ⁹⁵
220-14X 220 14 el beam, 14.5' bm, 13.5db	142.00	119 ⁹⁵
220-22LXB 220 22el beam, 29.75'bm, 15.6db	178.00	154 ⁹⁵
IV-220X 220 7' vertical ant, 5 db	168.00	39 ⁹⁵
432-20LXB 432 20 el, 12.33'bm, 15.3db	189.00	169 ⁹⁵
432-30LXB 432 30 el beam, 22'bm, 17.3db	222.00	194 ⁹⁵
435-18C 432 circ 18el, 7'bm, 12db/CS2	267.00	239 ⁹⁵
435-18CM 432 circ 18 el beam, no switcher	186.00	169 ⁹⁵
435-40XC 432 circ 40el beam, 15'bm, 15.2db/CS2	309.00	269 ⁹⁵
435-40XCM 432 circ 40 el beam, no switcher	221.00	199 ⁹⁵
440-6X 440 6 el beam, 2.33' boom, 8.9 db	65.00	59 ⁹⁵
440-10X 440 10 el beam, 5.33' bm, 11.2 db	82.00	74 ⁹⁵
440-16X 440 16 el beam, 10.33'bm, 14.2db	142.00	124 ⁹⁵
1.2-15LXB 1.2 GHz 15 el beam	127.00	114 ⁹⁵
1.2-24LXB 1.2 GHz 24 el beam	155.00	139 ⁹⁵
1.2-44LXB 1.2GHz 44el beam, 12'bm, 18.2db	200.00	179 ⁹⁵
CS-2 432 antenna circularity switch	85.00	79 ⁹⁵
CS-3 2m antenna circularity switch	55.95	
LO-With Large set: 2M22C/43540CX/7' mast	585.00	499 ⁹⁵
LO-Without Large set: 2M22C/43540CX/mast	462.00	399 ⁹⁵
SO-With Small set: 2M14C/43518C/5' mast	462.00	399 ⁹⁵
SO-Without Small set: 2M14C/43518C/mast	364.00	319 ⁹⁵

FIBERGLASS MASTS

5 1/2" OD fiberglass mast	\$ 40.00	34 ⁹⁵
7 1/2" 1 1/2" OD fiberglass mast	50.00	44 ⁹⁵

COUPLERS/POWER DIVIDERS

440-2N 432 MHz - for 2 ants, w/type N	\$ 81.95	
440-4N 432 MHz - for 4 ants, w/type N	91.95	

*These antennas are drop-shipped (shipped direct to you from the KLM factory). On these factory drop-shippments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Monroe, Washington via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order antennas.

KACHINA (KAC)

505-DSP/505DSP2 PC cont HF Xcvr/mic	Δmw	2150.00 1749 ⁹⁵
505-AT Internal automatic ant tuner	Δmf	239.95 219 ⁹⁵
505-DSP/505-AT2 PC HF Xcvt/ant tuner installed		2419.95 2199 ⁹⁵
505-AA Amp adapt; other than 12vdc spec ord		45.95
505-ECH External cover for control head		25.95
505-MB Mobile mount bracket		40.95
505-SM Rubber shock mounts; 505-MB		20.95
505-RC Rem cont interface; need 2 spec ord		298.95
505-TK Tuning knob; need serial port spec order		199.95
970055 25' control head cable		49.95
970056 75' control head cable		89.95
970057 25' RS-232 cable		16.95
970058 75' RS-232 cable		37.95

KC Tracker (See L.L. GRACE)

KANTRONICS (KAN)

Data Engine TNC w/no modems	Dmwf	\$319.95 229 ⁹⁵
Data Engine w/DE-1200 modem	Dmwf	389.95 279 ⁹⁵
DE-1200 1200 baud modem	Dmwf	89.95 39 ⁹⁵
DE-19K2/9K6 19.2/9600 baud modem	Dw	109.95 89 ⁹⁵
KPC-3 Plus/128K Small packet TNC/128K RAM		149.95
KPC-3 Plus User's Guide (comes w/KPC3+)		19.95
KPC-9612 Plus/128K 9600 controller/128K		299.95
\$10 rebate form; 9612 for K-1 2m Xmr kit only thru 12/1/98		
Pager Book FREE with 9612 Plus/128 thru 12/1/98		
128K 128K memory upgrade; KPC-3/9612		24.95
KAM Plus All Mode Communicator	†	349.95 319 ⁹⁵
KAM 98 Single port multi-mode dig controller		449.95 399 ⁹⁵
\$20 factory rebate from Kantronics; KAM 98 thru 12/1/98		
G-TOR Book FREE with KAM 98 thru 12/1/98		
12VDC Adaptor 300ma adapt; KAM Plus/KPC3		9.95
Host Master II+ IBM software		89.95
Package 1 Enhancement board; KAM		119.95
Package 2 Upgrade; KAM enhance brd Dmwf		39.95
Package 3 Upgrade; KAM Plus		39.95
Pactern 98 Software for Kantronics TNCs		69.95
Superfax II WX FAX program for IBM		49.95
APRS adapter cable; GPS to Kantronics TNC		29.95
G-TOR Book		14.95
K-1 1w 2m transmitter kit		79.95
Pager Handbook for the Radio Amateur		14.95

KENWOOD (KEN)

TS-950SDX Dlx Xcvt w/keyer/DSP/filters		5299.95 3999 ⁹⁵
DRU-2 Digital recording unit		149.95 139 ⁹⁵
IF-232C Level translator		129.95 119 ⁹⁵
MC-43S Extra 8-pin hand mic w/up-down		59.95
MC-60A 8-pin amp desk mic w/up-down		159.95 149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down		119.95 109 ⁹⁵
MC-90 2-head DSP desk microphone		269.95 239 ⁹⁵
SP-950 External spkr w/audio filters		159.95 149 ⁹⁵
VS-2 Voice synthesizer		69.95
YG-455CN-1 250 Hz CW filter (2nd IF)		179.95 164 ⁹⁵
YK-88CN-1 270 Hz CW filter (1st IF)		139.95 129 ⁹⁵
YK-88SN-1 1.8 KHz SSB filter (1st IF)		139.95 129 ⁹⁵
TS-870S 9-band Xcvt/SW Rcvr/AFDSP/tuner		3199.95 2399 ⁹⁵
SP-40 Switching power supply		229.95 199 ⁹⁵
PS-52 Heavy duty power supply		309.95 269 ⁹⁵
DRU-3A Dig recording unit; TS-870/570		139.95 129 ⁹⁵
MC-43S Extra 8-pin hand mic w/up-down		59.95
MC-60A 8-pin amp desk mic w/up-down		159.95 149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down		119.95 109 ⁹⁵
MC-90 2-head DSP desk microphone		269.95 239 ⁹⁵
SP-2 TCXO unit		189.95 179 ⁹⁵
SP-31 External speaker		99.95
VS-2 Voice synthesizer		69.95
TS-5700(G) 9-band Xcvt/SW Rcvr/AFDSP/tune/mic		1749.95 1199 ⁹⁵
TS-705(G) 9-band Xcvt/SW Rcvr/AFDSP/tune/mic	†	2069.95 1389 ⁹⁵
PS-40 Switching power supply		229.95 199 ⁹⁵
PS-53 Heavy duty 22.5A power supply		289.95 249 ⁹⁵
DRU-3A Dig recording unit; TS-570/870		139.95 129 ⁹⁵
KSS Sky command system; 570/870 special order		1177.85 899 ⁹⁵

KENWOOD - continued

MB-430 Mobile mounting bracket		49.95
MC-43S 8-pin hand mic w/up-down		59.95
MC-60A 8-pin amp desk mic w/up-down		159.95 149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down		119.95 109 ⁹⁵
MC-90 2-head DSP desk microphone		269.95 239 ⁹⁵
PG-22 Heavy duty DC cable		37.95
SO-2 TCXO unit		189.95 179 ⁹⁵
SP-23 External speaker		89.95
VS-3 Voice synthesizer		39.95
YK-88C-1 500 Hz CW filter		139.95 129 ⁹⁵
YK-88CN-1 270 Hz CW filter		139.95 129 ⁹⁵
YK-88SN-1 1.8 KHz SSB filter		139.95 129 ⁹⁵
TS-50S Compact HF Xcvt/SW Rcvr/mic/mt		1169.95 849 ⁹⁵
TS-60S Compact 6m Xcvt/mic/mt		1199.95 999 ⁹⁵
PS-40 Switching power supply		229.95 199 ⁹⁵
PS-53 Heavy duty 22.5A power supply		289.95 249 ⁹⁵
AT-50 External HF auto tuner		379.95 329 ⁹⁵
PG-4M 18' extension cable for AT-50		29.95
IF-100 Computer interface		89.95
IF-232C Level translator		129.95 119 ⁹⁵
MB-13 Deluxe quick release mtg bracket		55.95
MC-47 Extra multi-func 8-pin hand mic		59.95
MC-60A 8-pin amp desk mic w/up-down		159.95 149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down		119.95 109 ⁹⁵
PG-2Y DC cable		39.95
SO-2 TCXO unit		189.95 179 ⁹⁵
SP-23 External speaker		89.95
TC-50/50Case Travel case for TS-50S/60S		89.95
YK-107C 500 Hz CW filter		139.95 129 ⁹⁵
AT-850 80-10m int auto tuner; TS-850S	Δf	279.95 249 ⁹⁵
YK-88C 500 Hz CW filter; R-5000	Δmf	139.95 129 ⁹⁵
YK-88CN 270 Hz CW filter; R-5000	Δmf	104.95 94 ⁹⁵
YK-88SN 1.8 KHz SSB filter; R-5000	Δm	139.95 129 ⁹⁵
DFK-7A Dlx 22' rem cbl kit; 255A/455A	Δfv	99.95 74 ⁹⁵
CS-1765-08 Adaptor cord; MC-85 - 8-pin Xcvt		21.95
HS-5 Deluxe headset phones		79.95
HS-6 Lightweight headphones		59.95
LF-30A 1kw PEP low pass filter		64.95
MA-5 5-band 200w PEP HF mob ant	Dmwf	189.95 139 ⁹⁵
VP-1 Hvy duty chrome spg, bpr mt	Dmwf	64.95 29 ⁹⁵
MC-43S 8-pin hand mic w/up-down switch		59.95
MC-60A 8-pin amp desk mic w/up-down		159.95 149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down		119.95 109 ⁹⁵
PC-1A 8-pin phone patch	Dmwf	139.95 129 ⁹⁵
PG-3B 15A DC line noise filter		29.95
PG-3G 25A DC line noise filter		51.95
SP-50B High quality external mobile speaker		55.95
TSU-5 Prog CTCSS decoder; TS-790A	Δmf	64.95
TU-7 Prog encoder; TR-751A	Δm	54.95
TU-8 CTCSS tone unit; TS-450S/690S	Δmw	54.95 49 ⁹⁵
UT-10 10w 1.2 GHz module; TS-790A	Δmf	629.95 549 ⁹⁵
YG-455C-1 500 Hz CW filter; TS-450/690	Δm	169.95 149 ⁹⁵
YK-88S-1 2.4 KHz SSB filter; 450/690	Δmf	139.95 129 ⁹⁵
TM-742AD 2m/220 FM Xcvt/backlit TTP mic		989.95 739 ⁹⁵
TM-742AD 50/35w 2m/440FM/backlit TTP mic	†	959.95 649 ⁹⁵
MFJ 916 duplexer FREE with TM-742AD! Limited Time!		
DFK-3 9' separate display cable kit		26.95
DFK-4 13' remote cable kit		59.95
DFK-7 Deluxe 22' remote cable kit		89.95
MJ-88 Modular to 8-pin mic adapter		30.95
MJ-89 Modular mic switch		69.95
TSU-7 CTCSS decoder unit		59.95
UT-50S 50w 6m unit		379.95 329 ⁹⁵
UT-220S 25w 220 MHz unit		379.95 329 ⁹⁵
UT-400S 35w 440 MHz unit		339.95 299 ⁹⁵
UT-1200 10w 1.2 GHz unit		459.95 399 ⁹⁵
DFK-3B 9' sep disp cable kit; TM-733A	Δmf	39.95
DFK-4B 13' rem cable kit; TM-733A	Δmf	60.95
DFK-7B Dlx 22' rem cbl kit; TM-733A	Δmf	99.95 94 ⁹⁵
TM-6707A 50w 2m/35w 440 FM/TTP mic	†	519.95 339 ⁹⁵
TM-677A 50w 2m/35w 440 FM Xcvt/TTP mic	†	719.95 499 ⁹⁵
DFK-3C 9' separate display cable kit		44.95
DFK-4C 13' remote cable kit		64.95

PRICE LIST

KENWOOD - continued

DFK-7C Deluxe 23' remote cable kit	99.95	
MJ-88 Modular to 8-pin mic adapter	30.95	
MJ-89 Modular mic switch	69.95	
PG-45 PC interface cable	32.95	
PG-5A Packet data cable	15.95	
V5-3 Voice synthesizer	39.95	
MA-700 3db 2m/5.5db 440 ant w/duplexer ..	109.95	99 ⁹⁵
Larsen PO-K Roof mt, coax; MA-700	25.95	
Larsen PO-MM Magnet mt, coax; MA-700 ..	31.95	
Larsen PO-TLM Trunk lip mt, coax; MA-700	27.95	
TM-331A 25w 220 FM Xcvr w/TTP mic	579.95	499 ⁹⁵
KC-52DM back-lit TTP mic FREE w/TM-331A!	Limited Time!	
MQT-8/TSU-6 Prog CTCSS decoder	49.95	
MC-44DM Extra multi-function TTP mic	79.95	
TM-541A 10w 1.2 GHz FM Xcvr/TTP/encoder ..	579.95	499 ⁹⁵
TM-261A 50w 2m FM Xcvr w/TTP mic	379.95	199 ⁹⁵
TM-461A 35w 440 FM Xcvr w/TTP mic	509.95	439 ⁹⁵
DTU-2 Digital paging unit	32.95	
TSU-8 CTCSS decoder	59.95	
MC-45DM Extra multi-function TTP mic	79.95	
MC-52DM Back-lit TTP mic; 241/331/441/541	79.95	29 ⁹⁵
MC-53DM Back-lit TTP mic; 251/733/42/255/7A	79.95	29 ⁹⁵
Accessories for TH-75A/77A/25AT/26AT		
BT-6 6-AA battery case	\$ 29.95	19 ⁹⁵
KNB-7A 800ma 12v (5w) battery	87.95	
PG-36 Cig cord w/filter for DC-1	35.95	19 ⁹⁵
Accessory for TH-27A/47A		
TH-48A 2w 440 FM HT/batt/cgr/TTP	469.95	229 ⁹⁵
Accessories for TH-28A/48A/78A		
BC-15A Rapid cgr; PB-13/14/17/18	\$119.95	29 ⁹⁵
ME-1 Memory expansion	39.95	
PB-17 700ma 12v (5w) battery	99.95	
SC-33 Small soft case; 28A/48A	24.95	14 ⁹⁵
SC-34 Large soft case; 28A/48A	24.95	
SC-35 Regular soft case; 78A	24.95	99 ⁹⁵
SC-36 Large soft case; 78A	24.95	99 ⁹⁵
TH-22ATH 5w 2m FM HT/batt/KSC-8A/TTP ..	324.95	229 ⁹⁵
TH-42AT 2.5w 440 FM HT/batt/cgr/TTP	399.95	299 ⁹⁵
TH-79AKSS 5w 2m/440 FM HT/batt/cgr/TTP ...	579.95	449 ⁹⁵
BH-6 Swivel mount	39.95	
BT-9 4-AA battery holder	29.95	
EMC-3 Lapel clip mic/ear piece	29.95	
HMC-3 VOX/boom mic headset	59.95	
KSC-8A Drop-in cgr; 25/26/75/77/22/42/79	26.95	
KSC-14 2-pack rapid charger	87.95	
PB-32 600ma 6v battery	66.95	19 ⁹⁵
PB-33 1200ma 6v battery	89.95	
PB-34 600ma 9.6v (5w) battery	89.95	
PG-2W DC cable w/fuse	17.95	
PG-3J Cig lighter cord w/filter	36.95	
SC-37 Soft case; 22/42AT/PB-30/32 Dmf ..	24.95	19 ⁹⁵
SC-41 Soft case; TH-79A(D) w/PB-32	24.95	
SC-43 Soft case; TH-79A(D) w/PB-33/34 ...	24.95	
SMC-32 Mini water resist r angle spkr/mic ..	52.95	
SMC-33 Speaker/mic w/remote control	65.95	
SMC-34 Spkr/mic w/vol cont/function keys ..	39.95	
TSU-8 CTCSS decoder; TH-22/42AT	59.95	
W-2 Water resistant bag; TH-22/42AT	29.95	
TH-771A 5w 2m/440 FM HT/batt/cgr/TTP	429.95	*299 ⁹⁵
*Sale price with \$40 instant coupon thru 11/30/98		
PB-38 battery FREE direct from Kenwood thru 11/30/98!		
BC-19 Rapid charger	64.95	
BT-11 4-AA battery holder	17.95	
EMC-3 Lapel clip mic/ear piece	29.95	
HMC-3 VOX/boom mic headset	59.95	
J29-0631-13 Belt clip for extra batt; TH-G71A	4.95	
PB-38 650ma 6v battery	44.95	
PB-39 600ma 9.6v (5w) battery	57.95	
PG-2W DC cable w/fuse	17.95	
PG-3J Cig lighter cord w/filter	36.95	
PG-4P Computer control cable	32.95	
SC-45 Soft case for PB-38/39	15.95	
SMC-32 Mini water resist r angle spkr/mic ..	52.95	

Reg Sale

KENWOOD - continued

SMC-33 Speaker/mic w/remote control	65.95	
SMC-34 Spkr/mic w/vol cont/function keys ..	39.95	
BT-10 6 AA alk batt case; TH-235A	13.95	12 ⁹⁵
PB-36 7.2v 950ma nicad batt; 235A	49.95	34 ⁹⁵
PB-37 12v 950ma (5w) nicad; 235A	57.95	
EZ-PASS WIN 95 No-code tech study package	34.95	
Primer Welcome to Amateur Radio primer	2.00	50 ⁹⁵
VC-H1 Visual Communicator SSTV unit	584.95	499 ⁹⁵
KOSS (KOS)		
GT/3 Stereophone w/covered headband ...Dm	\$ 14.99	
GT/4 Stereophone w/volume control	19.99	
GT/5 Stereophone w/replaceable ear cushions	29.99	
HD/30 Dual amplified stereo speakers	29.99	
HD/33 Computer stereophone/volume control	14.99	
QZ/99 Noise reduction stereoph w/mono sw ..	59.99	
SP/5 Sidelining yellow stereophone	7.99	
LARSEN (LAR)		
27-31 MHz ANTENNA		
NMO-27C 10m ant only (no mount)	\$ 33.95	
47-54 MHz ANTENNA		
NMO-50C 6m ant only (no mount)	\$ 33.95	
144-174 MHz ANTENNAS		
NMO-150B 2m black ant only (no mt), 3 db ..	\$ 33.95	
NMO-150C 2m ant only (no mount), 3 db	30.95	
220-265 MHz ANTENNAS		
NMO-220B 220 black ant only (no mt), 3 db ..	\$ 35.95	
NMO-220C 220 ant only (no mount), 3 db	30.95	
440-460 MHz ANTENNAS		
NMO-440B 440 black ant only (no mt), 5 db ..	\$ 35.95	
NMO-440C 440 ant only (no mount), 5 db	29.95	
MM-2/70 2m/440 1/4 wave/2db mag mt ant ..	42.95	
NMO-2/70B 2m/440 blk ant only (no mt), 2/4db ..	54.95	
NMO-2/70C 2m/440 ant (no mount), 2/4db ...	50.95	
NMO-2/70-SH 2m/440 ant (no mt), 1/4 vv/2db	33.95	
NMO-012 135-160/148-173 2.5db (no mt)	50.95	24 ⁹⁵
NMOQ-Spec 136-512 MHz 1/4 wave ant (no mt)	9.95	
NMOQ-Spec-B 136-512 black 1/4 wv ant (no mt)	13.95	
NMOQ-Spec-K 136-512MHz 1/4 wv 1/4" hole ant	23.95	
NMOQ-2/70-B 2m/440 1/4 wv cell look ant (no mt)	31.95	
NMO-1290B 1.2 GHz black ant only (no mt) ..	32.95	
FB1-136 Base station 136-230 MHz ant	137.80	129 ⁹⁵
ON GLASS ANTENNAS		
KG-144-UD-PL 2m 3 db on glass antenna ...	\$ 70.95	
KG-220-UD-PL 220 3 db on glass antenna ..	70.95	
KG-440-UD-PL 440 2.4 db on glass antenna ..	58.95	
KG-2/70-CX-PL 2m/440 2.5/4.5db on glass ..	95.95	
KG-Reinstall Reinstall kit for KG-ants	5.95	
KULDUCKIES - For Hand-helds		
KD4-146 2m BNC Kulduckie	\$ 17.95	
KD4-270 2m/440 BNC Kulduckie	28.95	
KD4-222 220 BNC Kulduckie	17.95	
KD4-445 440 1/4 wave BNC Kulduckie	17.95	
KD4-146-HQ 2m part helical, part 1/4 wave BNC	22.95	
KD4-2M-HW 2m 1/4 wave BNC antenna	34.95	
KD4-440-HW 440 1/4 wave BNC antenna	34.95	
ACCESSORIES & REPLACEMENT PARTS		
A-7 Adapter for NMO antenna on NLA mount	\$ 8.95	
AD-2/70 100w 2m/440 duplexer	75.95	
BSA-K Base mounting kit for mobile ant	46.95	
NMO-CAP-B Black rain cap for NMO mount ..	3.95	
NMO-K 1/4" hole mt w/coax for NMO ant	13.95	
NMO-MM Magnet mt, coax for NMO ant	29.95	
NMO-TLP Low profile tnl lid mt, coax; NMO ant	26.95	
PO-K Roof mt, coax for SO-239 ant	25.95	
PO-MM Magnet mt, coax for SO-239 ant	31.95	
PO-TLM Trunk lip mt, coax for SO-239 ant ..	27.95	
RG-SS Extra super seal NMO gaskets (3)	3.95	
SPRING Shock spring	8.95	
TMB-34 Trunk mtg bkt for NMO antenna	4.95	

Reg Sale

LARSEN - continued

TMB-34B Black trunk mtg bkt for NMO ant ..	6.95	
W-154 Extra closed coil whip; 440 ant ...Δwv	17.80	4 ⁹⁵
W-490 49' whip	9.95	
W-490B Black 49' whip	12.95	
LOGSAT (LOG)		
Logsat Professional Satellite tracking CDROM	\$ 69.95	
MFJ ANTENNA TUNERS (MFJ)		
898C Dlx 3kw PEP w/roller inductor	\$359.95	319 ⁹⁵
896 3kw PEP w/roller inductor	329.95	299 ⁹⁵
962D 1.5kw PEP/meter/switch/balun/roller ind	269.95	249 ⁹⁵
949 HF & 6m 300w roller inductor tuner	189.95	179 ⁹⁵
949E 300w/meter/dummy/sw/balun	149.95	139 ⁹⁵
1312C 12vdc 300ma ps 2.5mm coaxial; 949E	12.95	
948 300w/meter/switch/balun	129.95	119 ⁹⁵
941E 300w tuner w/meter, switch, balun	119.95	109 ⁹⁵
945E 300w tuner w/meter plus 6m	109.95	99 ⁹⁵
20 Mobile bracket for 945E	4.95	
901B Versa Tuner 200w ant tuner	79.95	
910 80-10m mobile antenna matcher	19.95	
16010 200w random wire tuner	49.95	
903 6m antenna tuner	49.95	
906 6m antenna tuner w/wattmeter	79.95	
914 Auto tuner extender	59.95	
921 2m/220 300w PEP tuner/SWR/wattmeter	69.95	
922 2m/440 150w tuner/SWR/wattmeter	69.95	
924 440 MHz 300w PEP tuner/SWR/wattmeter ..	79.95	
934 300w tuner w/artificial ground	169.95	159 ⁹⁵
MEMORY KEYS		
451 Dedicated CW keyboard w/memory	\$ 99.95	89 ⁹⁵
451X Morse keyboard interface only	79.95	
452 CW keyboard/keyer w/disp/keyboard	129.95	119 ⁹⁵
452X CW keyboard/keyer w/disp, no keyboard	99.95	89 ⁹⁵
498 Dlx CW keyboard/keyer w/disp/keyboard ..	179.95	169 ⁹⁵
498X Dlx CW keyboard w/disp, no keyboard ...	159.95	149 ⁹⁵
490 492 keyer/Bencher paddle combination ..	174.95	164 ⁹⁵
490X 492 keyer for use w/Bencher or 564 ...	109.95	99 ⁹⁵
564 Deluxe iambic paddle for 490X	49.95	
492 192 char menu driven memory keyer	99.95	89 ⁹⁵
80 8000 char memory expansion for 492 ...	14.95	
492X Memory keyer w/8000 char expansion ...	114.95	104 ⁹⁵
78 Remote control for 492/492X	19.95	
493 32K char menu driven mem keyer	139.95	129 ⁹⁵
79 Remote control for 493	19.95	
551 IBM AT-101 keyboard for 493	39.95	
5409 9-pin serial port 6' cable for 493	12.95	
5425 25-pin serial port 6' cable for 493 ...	12.95	
ELECTRONIC KEYS		
4070 Deluxe electronic keyer	\$ 69.95	
4010 Econo keyer	49.95	
KEYER/PADDLES		
4220 Keyer/Bencher paddle combination	\$144.95	134 ⁹⁵
422CX Keyer only	79.95	74 ⁹⁵
422DX Keyer only	79.95	
441 SlimLine econo keyer	59.95	
442 SlimLine keyer/Bencher paddle combo ...	154.95	144 ⁹⁵
44X SlimLine keyer only	89.95	
447 SlimLine deluxe keyer	79.95	
564 Deluxe iambic chrome paddle	49.95	
564B Deluxe iambic black paddle	49.95	
COMPUTER INTERFACES		
1224 Interface	\$109.95	99 ⁹⁵
1265 Disk software for VIC/C64; 1224	19.95	
1265 Software for IBM; 1224	19.95	
1265B Disk software; VIC/C64; 1225	19.95	99 ⁹⁵
1270C Packet radio TNC2	119.95	109 ⁹⁵
47A Mailbox 32K mem; 1270/1274	49.95	29 ⁹⁵
47B Mailbox 128K mem; 1270/1274	69.95	49 ⁹⁵
47C Mailbox 512K mem; 1270/1274	149.95	99 ⁹⁵
2400 2400 baud modem	29.95	
9600B 9600 baud modem	109.95	99 ⁹⁵
1270CT Turbo packet w/2400 baud	149.95	139 ⁹⁵

Reg Sale

MFJ - continued

1270CQ Packet w/9600 baud modem	239.95	219 ⁹⁵
1276 Packet/Pactor controller	149.95	139 ⁹⁵
1276T Packet/Pactor Turbo controller	179.95	169 ⁹⁵
1278B Multi-mode controller w/Pactor	299.95	269 ⁹⁵
1278B/DSP Controller w/Pactor & DSP	379.95	349 ⁹⁵
45A 32K RAM IC only	14.95	8 ⁹⁵
45C 512K RAM IC only	99.95	69 ⁹⁵
48 1278 upgrade	24.95	
48B 1278B upgrade	24.95	
48E 1278 packet encryption EPROM	29.95	19 ⁹⁵
52 TNC2 deviation meter board	29.95	
56A Pactor/mailbox 32K board for 1278B	69.95	
56B Pactor/mailbox 128K board for 1278B	89.95	
56C Pactor/mailbox 512K board; 1278B	149.95	139 ⁹⁵
780 DSP data filter for 1278B	99.95	89 ⁹⁵
2400 2400 baud modem	29.95	
9600B 9600 baud modem	109.95	99 ⁹⁵
1278BT Turbo controller/2400/Pactor	329.95	299 ⁹⁵
1282 C64 starter pack	24.95	
1282B Multicom package; C64/128	39.95	
1282BD Multicom 64 disk only	29.95	14 ⁹⁵
1284 5 1/4" IBM starter pack	24.95	
1284D 1284 disk only	14.95	
1284M 3 1/4" IBM starter pack	24.95	
1284MD 1284M disk only	14.95	
1284W MFJCOM for Windows	29.95	
1287 Macintosh starter pack	24.95	
1287B Mac multicom starter pack	49.95	
1287D 1287 disk only	14.95	6 ⁹⁵
1287BD 1287B disk only	39.95	19 ⁹⁵
1288 Packet terminal program	9.95	
1289 5 1/4" multicom software for IBM Dmwf	59.95	44 ⁹⁵
1289D 1289 disks only	49.95	29 ⁹⁵
1289M 3 1/4" multicom software for IBM	59.95	
1289MD 1289M disks only	49.95	
1289W Multicom for Windows with cable	59.95	
1289WD Multicom for Windows, less cable	49.95	
1293 JVFax/HamCom soft/FJ-1213	9.95	
1214PC Multimode interface for IBM	149.95	139 ⁹⁵
59M 1214 3 1/4" software upgrade	29.95	
40B TNC2 upgrade 32K/RAM	29.95	14 ⁹⁵
40C TNC2 upgrade 32K	19.95	
40E TNC2 packet encryption EPROM	29.95	14 ⁹⁵
43 Real time clock for TNC	19.95	
44 Plug-in scope tuning adapter	19.95	
52B FM deviation/temp/volt meter for TNC	39.95	
781 DSP filter for any TNC or controller	129.95	119 ⁹⁵
1271 Packet card for C64/128	49.95	
1272B TNC to microphone interface	39.95	
1272BX TNC/mic switch; PK-232	39.95	
1272BYH TNC/mic switch; KAM HF	39.95	
1272BYV TNC/mic switch; KAM VHF	39.95	
1272BZ TNC/mic switch; PK-88	39.95	29 ⁹⁵
1272M TNC/mic RJ-45 switch; MFJ/PK-900	39.95	
1272MX TNC/mic RJ-45 switch; PK-232 Dmwf	39.95	
1272MYH TNC/mic RJ-45 switch; KAM HF	39.95	
1272MYV TNC/mic RJ-45 sw; KAM VHF; KPC3	39.95	
1272MZ TNC/mic RJ45 switch; PK88	39.95	29 ⁹⁵
1273 Packet tuning indicator	49.95	9 ⁹⁵

SSB/CW FILTERS

722 SSB/CW notch filter	\$ 79.95	
752C Dual tunable SSB/CW filter	99.95	89 ⁹⁵
784B Deluxe tuneable DSP filter	249.95	229 ⁹⁵
5184 Cable pack for 784B	7.95	

PHONE PATCH

624D Phone patch w/audio VU meter	\$129.95	119 ⁹⁵
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DUMMY LOADS

250 2kw PEP dummy load w/oil	\$ 49.95	
250X 2kw PEP dummy load, less oil	29.95	
260C 300w 0-650 MHz dry dummy load	29.95	
260CN 300w 0-650 MHz type N dry dummy	34.95	
264 1.5kw 0-650 MHz dry dummy load	59.95	
264N 1.5kw 0-650 MHz type N dry dummy	69.95	

MFJ - continued

SWR/WATTMETERS		
812B 144-220 MHz SWR/FS/wattmeter	\$ 34.95	
815B 160-6m cross-needle SWR/wattmeter	69.95	
816 1.8-30 MHz toroidal SWR/wattmeter	34.95	
817 2m/440 cross needle meter	79.95	
840 2m 5w wattmeter/dummy load for HT	19.95	
841 2m 5w in-line HT wattmeter/SWR	39.95	
860 1.8-60 MHz cross-needle meter	44.95	
862 2m/220/440 cross-needle meter	54.95	
864 1.8-60MHz/2m/440 cross needle meter	84.95	
SHORTWAVE ACCESSORIES		
306 Car radio SWL converter	\$ 79.95	
956 LW/MW/SW preselector/tuner	39.95	
959B Receiver ant tuner w/preamp	99.95	
1020B 3-30 MHz indoor active rcv ant	69.95	
1022 300KHz-200MHz active rcv antenna	39.95	
1024 .05-30 MHz outdoor active rcv ant	129.95	119 ⁹⁵
1040B Deluxe receiver preselector	99.95	
1045C Receiver preselector	69.95	

BOOKS

30 Golden Classics book	\$ 9.95	
31 Oscar book	7.95	
32 Packet Made Easy book	9.95	
33 Mobile Handbook book	12.95	
35 World of Ham Radio book	7.95	
36 Shortwave Listeners Guide; Apts/Condos	9.95	
37 Ham Communications Circuit Files book	9.95	
38 Easy-up Antennas book	16.95	
3036 The Packet Radio Operators book	12.95	
3101 Fox Hunt Adventure book	7.95	
3210 Novice license guide	7.95	
3211 Tech Plus license guide	7.95	
3212 No code tech license guide	14.95	
3213 General license guide	7.95	
3214 Advanced license guide	7.95	
3215 Extra license guide	7.95	
3301 Troubleshooting Antenna & Feedlines book	12.95	
3302 73 Dipole and Long-Wire Antennas	12.95	
3303 73 Vertical, Beam, and Triangle Ants	12.95	
3304 Technician Antenna Handbook	9.95	4 ⁹⁵
3305 Antennas & Transmission Lines book	19.95	
3400 Morse Code: Breaking the Barrier	14.95	
3502 Solid State QRP Projects	12.95	
3504 FET Principles, Experiments & Projects	16.95	
3506 Ferromagnetic-Core Design book	19.95	
3507 Practical RF Design Manual	19.95	
3508 Radio Components Handbook	29.95	

ACCESSORIES

1305 5vdc 300ma adapter	\$ 12.95	
1312 12vdc 300ma adapter, 2.5mm plug	12.95	
1312B 12vdc 300ma adapter, 2.1mm plug	12.95	
1312C 12vdc 300ma adapter; 2.5mm coaxial	12.95	
1315 12vdc 500ma adapter	14.95	
105C 24-hour quartz wall clock	19.95	
107B 24-hour digital clock	9.95	
108B 24/12-hour dual disp digital clock	19.95	
112 Deluxe world map clock	24.95	
114 Large LED 24-hour clock	39.95	
116 24/12-hour LED clock/10 minute timer	14.95	
118 Giant 24/12 hour LCD clock	24.95	
119 Giant 24/12 hour LCD/in temp clock	49.95	
152 Thermo clock; in/out temp/24-hr clock	24.95	
201 1.5-250 MHz dip meter	119.95	109 ⁹⁵
202B RF noise bridge	59.95	
203 160-10m bandswitched dip meter	99.95	89 ⁹⁵
204B Antenna bridge	79.95	
206 Antenna current probe	79.95	
207 160-10m SWR analyzer	79.95	
208 2m SWR analyzer	79.95	
209 1.8-170 MHz SWR analyzer	129.95	119 ⁹⁵
212 MatchMaker tune up device	79.95	
214 Amplifier Saver	49.95	
216 Deluxe Amplifier Saver	59.95	

MFJ - continued

217 SWR analyzer, 30-50 MHz	79.95	29 ⁹⁵
218 SWR analyzer, 150-170 MHz	79.95	39 ⁹⁵
219B SWR analyzer, 440 MHz/N50-239 adapt	99.95	89 ⁹⁵
219N SWR analyzer, 440 MHz w/type N	99.95	69 ⁹⁵
224 2m FM signal analyzer	159.95	149 ⁹⁵
249B 1.8-170 MHz SWR anal/LCD counter	219.95	199 ⁹⁵
86 249 to 259 upgrade kit	29.95	
259B 1.8-170 MHz SWR analyzer/RF res meter	249.95	229 ⁹⁵
29 Padded carrying pouch; 209/249/259	19.95	
29B Pouch w/window; 209/249/orig 259	24.95	
29C Pouch/back pocket/connector holes; 259B	24.95	
66 1.8-30/30-170MHz dip coils; 249B/259B	19.95	
99 Package of MFJ 29C/66/1315	54.95	
1315 12vdc 500ma adapter	14.95	
270 Guardian Angel 400w PEP lightning protect	29.95	
97 Gas tube plug for 270	9.95	
280 Compact mobile speaker	19.95	
281 ClearTone communications speaker	9.95	
283 Speaker/mic, split jack; Alinco	15.95	
284 Spkr/mic; Icom/Yaesu/Alinco	15.95	
285 Mini spkr/mic; Icom/Yaesu/Alinco	15.95	
285L Mini spkr/mic L; Icom/Yaesu/Alinco	15.95	
285W Mini spkr/mic for Icom IC-W2A	15.95	
285W(CC) Mini spkr/mic; Alinco credit card HTs	17.95	
286 Speaker mic; Kenwood	15.95	
287 Mini spkr/mic; Kenwood	15.95	
287L Mini spkr/mic L for Kenwood	15.95	
288I Headset/mic; Icom/ADI/Sta/RS/older Yae	24.95	
288K Headset/mic for Kenwood	24.95	
291I Earphone for Icom spkr/mic	4.95	
291K Earphone for Kenwood spkr/mic	4.95	
292I Earph/mic; Ico/older Yae/compatibles	17.95	
292K Earphone/mic for Kenwood HT	17.95	
292Y Earphone/mic; Yae FT-10/40/50/VX-1R	17.95	
295I Mini spkr/mic; Icom & compatible HT	15.95	
295Y Mini spkr/mic; Yae FT-10/40/50/VX-1R	15.95	
296I Spkr/mic w/vol control, PTT lock; Icom	19.95	
298I Vox spkr/mic; ADI/Alinco/RS/Sta/Yae	39.95	
310 BNC HT antenna window mount clip	14.95	
312 BNC HTAntennaClip antenna mount	14.95	
315 Universal Grippatic HT mount holder	14.95	
323 Keep-it-up battery maintainer	59.95	19 ⁹⁵
3338M 3.5" HiFlux NMO magnet mt	14.95	
3338S 3.5" HiFlux SO-239 magnet mt	14.95	
3358M 5" HiFlux NMO magnet mt	19.95	
3358S 5" HiFlux SO-239 magnet mt	19.95	
346 600 MHz LCD frequency counter	189.95	99 ⁹⁵
382 Deluxe amplified communications spkr	39.95	
411 Personal Morse Code Tutor	69.95	49 ⁹⁵
413 Basic Code Tutor	39.95	
414 Professional Morse Tutor w/LCD	199.95	189 ⁹⁵
417 Code Tutor with QSO	59.95	
418 Code Tutor with LCD display	79.95	
432 Voice Memory Keyer	119.95	109 ⁹⁵
462B RTTY/ASCII/CW/AMTOR Rcvr multi-reader	179.95	169 ⁹⁵
5162 Receiver cable for 462B	4.95	
550 Hand Key	7.95	
552 CW interface for 2m HT	59.95	
554 Deluxe CW practice oscillator	79.95	
554X Dlx oscillator w/281 spkr/550 key	99.95	
557 Code oscillator w/key	24.95	
641-12 Battery charger; Icom BP-131/132	49.95	
10-BC1-2 Charger cup; Icom BP-131/132	12.95	
641-13 Battery charger; Icom BP-173/180	49.95	
10-BC1-3 Charger cup; Icom BP-173/180	12.95	
641-K Battery charger for Kenwood	49.95	
641-Y2 Batt cgr; Yaesu FNB-10/11/12/17/27	49.95	
10-BCY-2 Cgr cup; Yae FNB-10/11/12/17/27	12.95	
641-Y3 Battery charger; Yaesu FNB-31/33	49.95	
10-BCY-3 Charger cup; Yaesu FNB-31/33	12.95	
641-Y4 Batt cgr; Yaesu FNB-40/41/V47/49	49.95	
10-BCY-4 Cgr cup; Yae FNB-40/41/V47/49	12.95	
701 Toroid RFI filters	14.95	
702 200w low-pass filter	24.95	

PRICE LIST

MFJ - continued

704	1kw low-pass filter	39.95
711	High pass filter	19.95
713	2m HT intermod filter	59.95
714	2m mobile intermod filter	59.95
762	81db 170MHz BNC attenuator	69.95
850	AC line voltage monitor	19.95
912	W9INN remote balun	49.95
916	2m/440 duplexer	29.95
931	Artificial ground unit	79.95
1025	Noise canceling antenna	149.95 139 ⁹⁵
1026	Deluxe noise canceling unit w/antenna	169.95 159 ⁹⁵
1046	1.6-33MHz receiver passive preselector	99.95 89 ⁹⁵
1048	1.6-33MHz Xcvr passive preselector	119.95 109 ⁹⁵
1112	Multiple DC outlet	29.95
1116	Dlx multiple DC outlet	44.95
1118	High current multiple DC outlet	69.95
1213	Interface for JVFA/HamComm	39.95
1266	C64 disk code tutor program	19.95 6 ⁹⁵
76	1266/67 interface brd; kyr/keyboard	19.95 1 ⁹⁵
1268	IBM PC memory keyer	49.95 19 ⁹⁵
1269	IBM code tutor	19.95
1281	IBM Easy-DX logging program	39.95
1286	Gray Line DX Advantage prog; IBM	29.95
1292	Video digitizer for IBM	199.95 119 ⁹⁵
1610	Novice theory tutor soft; IBM	29.95 14 ⁹⁵
1611	Tech theory tutor soft; IBM	29.95 14 ⁹⁵
1612	General theory tutor soft; IBM	29.95 14 ⁹⁵
1613	Advanced theory tutor soft; IBM	29.95 14 ⁹⁵
1621	40-10m 54" portable ant w/tuner	79.95
1633	Advanced theory tutor soft; Mac	29.95 9 ⁹⁵
1634	Extra theory tutor soft; Mac	29.95 9 ⁹⁵
1635	No-code theory tutor software; Mac	49.95 29 ⁹⁵
1680K	Windows soft package; Ken	109.95 69 ⁹⁵
1680Y	Windows soft package; Yaesu	109.95 59 ⁹⁵
1682	Packet Windows software	29.95
1683I	Rig Windows software for Icom	29.95
5383I	Icom Xcvr interface cable	49.95
1683K	Rig Windows software for Kenwood	29.95
5383K	Kenwood Xcvr interface cable	49.95
1683Y	Rig Windows software for Yaesu	29.95
5383Y	Yaesu interface cable, std 6-pin DIN	49.95
5383YB	Yaesu interface cable, mini 6-pin DIN	49.95
1700B	Combination ant/xmtr switch	79.95
1701	6-position coax switch	49.95
1702BN	2-pos 1.1GHz type N switch	31.95 29 ⁹⁵
1702C	2-pos coax switch/lightning protect	21.95
1702CN	2-pos 1.1GHz N switch/lightning protect	31.95
1704	4-pos 500 MHz switch/lightning protect	59.95
1704N	4-position type N switch	69.95
1710	2m 3/4 wave telescopic antenna	9.95
1712	2m/440 telescopic antenna	14.95
1713	2m/440 SuperFlex Thin Duk HT ant	19.95
1713S	2m/440 SuperFlex SMA Thin Duk ant	19.95
1714	2m 3/4 wave telescopic antenna	16.95
1715	2m/440 SuperFlex gain Thin Duk HT ant	24.95
1715S	2m/440 SuperFlex gain SMA Thin Duk	24.95
1716	2m/440 duck for HT	16.95
1716S	2m/440 SMA duck for HT	16.95
1717	Gain 2m/440 duck for HT	19.95
1721	2m shorty duck for HT	12.95
1721	2m HT UltraLite mag mt antenna	14.95
1722	2m/440 HT UltraLite mag mt antenna	18.95
1724B	2m/440 magnet mt antenna	14.95
1728B	2m 3/4 wave mag mt ant/PL259/BNC	24.95
1729	2m/440 magnet mt antenna	29.95
1730	2m pocket roll-up vertical ant	14.95
1734	2m/440 2.6/6.3db glass mt antenna	39.95
1736	6m J-Pole travel antenna	24.95
1738	2m 2.6db glass mt antenna	29.95
94	Remount kit for 1734/1738	4.95
1740	2m 3/4 wave ground plane ant	14.95
1750	2m 3/4 wave ground plane ant	19.95
1752	220 3/4 wave ground plane ant	19.95
1754	2m/440 ground plane antenna	24.95

Reg Sale

MFJ - continued

1756	6m DX vertical antenna	69.95
1762	6m beam antenna	69.95
1763	2m 3el portable beam	39.95
1764	2 & 6m dual 1/2 super gain base ant	44.95
1768	2m/440 beam antenna	69.95
1778	G5RV 160-10m 102' ant (needs tuner)	34.95
1782	Super Hi-Q 10-30 loop/basic control	339.95 269 ⁹⁵
1786	Super Hi-Q 10-30 loop/dlx contrl	379.95 289 ⁹⁵
1312B	12vdc 300ma adapter; 1782/1786	12.95
1788	40m Super Hi-Q loop antenna	429.95 349 ⁹⁵
1793	80/40/20m vertical antenna	179.95 169 ⁹⁵
1796	40/20/15/10/6/2m 10' vertical ant	199.95 179 ⁹⁵
1798	80/40/30/20/17/15/12/10/6/2m 20' vert	269.95 249 ⁹⁵
1824BB	Cell look alike BNC scanner ant	19.95
1828B	Magnet mt BNC scanner antenna	29.95
1828M	Mag mt Motorola plug scan ant	29.95 14 ⁹⁵
4035MV	Dlx 30A adjustable ps, 35A surge	149.95 139 ⁹⁵
4025MV	MightyLite 22A switching ps, 25A surge	149.95 139 ⁹⁵
4245MV	MightyLite 40A switching ps, 45A surge	199.95 189 ⁹⁵
5020R	MFJ TNC - Yaesu FT50R & compatibles	14.95
5020RYV	KAM VHF/KPC3 - Yae FT50R/comp	14.95
5022	MFJ TNC - Alinco/Standard HT cable	14.95
5022X	PK-232 - Alinco/Sta HT cable	14.95 6 ⁹⁵
5022YV	KAM VHF/KPC3 - Ali/Sta HT cable	14.95
5024	MFJ TNC - Ico/Yae/Al/RS HT cable	14.95
5024B	PK/PacComm/compatible - Ico/Yae/RS	14.95
5024X	PK-232 - Ico/Yae/Al/RS HT cbl	14.95 9 ⁹⁵
5024YV	KAM VHF/KPC3 - Ico/Yae/Al/RS HT cbl	14.95
5024Z	PK-88 - Ico/Yae/Al/RS HT cbl	14.95 4 ⁹⁵
5026	MFJ TNC - Kenwood HT cable	14.95
5026X	PK-232 - Kenwood HT cable	14.95 9 ⁹⁵
5026YV	KAM VHF/KPC3 - Kenwood HT cable	14.95
5026Z	PK-88 - Kenwood HT cable	14.95 2 ⁹⁵
5060	MFJ TNC - Ken/Yae acc 6-pin mini DIN	19.95
5060YQ	KPC9612 - Ken/Yae acc 6-pin mini DIN	19.95
5060YV	KAM VHF/KPC3 - Ke/Ya acc 6-pin mini DIN	19.95
5063	MFJ TNC - Icom HF acc 8-pin DIN	19.95
5063YH	KAM HF - Icom HF acc 8-pin DIN	19.95
5064	MFJ TNC - Icom VHF acc 5-pin DIN	19.95
5064YQ	KPC9612 - Icom VHF 8-pin DIN	19.95
5064YV	KAM VHF/KPC3 - Ico VHF acc 8-pin DIN	19.95
5065	MFJ TNC - Ico IC-706 acc 13-pin DIN	19.95
5065YH	KAM HF - Ico IC-706 acc 13-pin DIN	19.95
5065YV	KAM VHF - Ico IC706 acc 13-pin DIN	19.95
5066	MFJ TNC - Kenwood HF acc 13-pin DIN	19.95
5066YH	KAM HF - Ken HF acc 13-pin DIN	19.95
5068	MFJ TNC - Yaesu 8-pin cable	14.95
5080M	MFJ TNC - Yaesu 8-pin modular	14.95
5080MX	PK-232 - Yae 8-pin modular	14.95 9 ⁹⁵
5080MYV	KAM VHF/KPC3 - Yae 2500M/7400H	14.95
5080MZ	PK-88 - Yae 2500M/7400H	14.95 2 ⁹⁵
5080X	PK-232 - Yaesu 8-pin cable	14.95 9 ⁹⁵
5080YV	KAM HF port - Yaesu 8-pin cable	14.95
5080YV	KAM VHF/KPC3 - Yaesu 8-pin cable	14.95
5080Z	PK-88 - Yaesu 8-pin cable	14.95 4 ⁹⁵
5082	Open end - 8-pin mic cable	9.95
5084	MFJ TNC - Icom 8-pin cable	14.95
5084M	MFJ TNC - Icom 8-pin modular	14.95
5084MX	PK-232 - Ico 8-pin modular	14.95 9 ⁹⁵
5084MYV	KAM VHF/KPC3 - Icom 8-pin mod	14.95
5084MZ	PK-88 - Ico 8-pin modular	14.95 4 ⁹⁵
5084YV	KAM HF port - Icom 8-pin cable	14.95
5084YV	KAM VHF/KPC3 - Icom 8-pin cable	14.95
5084Z	PK-88 - Icom 8-pin cable	14.95 2 ⁹⁵
5086	MFJ TNC - Kenwood/Alinco 8-pin cable	14.95
5086M	MFJ TNC - Kenwood 8-pin modular	14.95
5086MX	PK-232 - Ken 8-pin modular	14.95 9 ⁹⁵
5086MYV	KAM VHF/KPC3 - Ken 8-pin mod	14.95
5086MZ	PK-88 - Ken 8-pin modular	14.95 2 ⁹⁵
5086YV	KAM HF port - Ken/Al/ 8-pin cable	14.95
5086YV	KAM VHF/KPC3 - Ken/Al/ 8-pin cable	14.95
5086Z	PK-88 - Ken/Al/ 8-pin cable	14.95 4 ⁹⁵
5088M	MFJ TNC - Radio Shack 8-pin modular	14.95
5088MX	PK-232 - RS 8-pin modular	14.95 6 ⁹⁵

Reg Sale

MFJ - continued

5088MYV	KAM VHF - RS 8-pin modular	14.95
5088MZ	PK-88 - RS 8-pin modular	14.95 6 ⁹⁵
5205	5-pin DIN open end cable	4.95
5208	Open end - Ico HF/VHF acc 8-pin DIN	9.95
5213	Open end - Kenwood acc 13-pin DIN	9.95
5220R	Open end - Yaesu FT50R/compatibles	9.95
5222	Open end - Ali split HT cable	9.95 1 ⁹⁵
5224	Open end - Ico/Yae/Al/RS HT cable	9.95
5226	Open end - Kenwood HT cable	9.95
5268	Open end - modular phone plug cable	9.95
5412	IBM printer cable	9.95
5413	RS-232 6' cable DB-25M-25F	9.95
5414	RS-232 6' cable DB-25M-9F	9.95
5803/10	3' coax jumper cable	4.95
8100K	Shortwave regenerative Rcvr kit	59.95
8100W	Shortwave regenerative Rcvr wired	79.95
8400K	2m receiver kit	79.95
8400W	2m receiver wired	99.95 89 ⁹⁵
9606X	6m FM/data Xcvr w/mic	169.95 159 ⁹⁵
8621	VHF data radio w/145.01 MHz	119.95 109 ⁹⁵
8621X1	APRS ready VHF data radio/145.79 Dmwf	139.95 109 ⁹⁵
8621X2	APRS ready VHF data radio/144.39	139.95 129 ⁹⁵
8631	220 MHz data radio w/223.70 MHz	149.95 139 ⁹⁵
4110	Portable AC power supply	49.95
5100	Data radio cable - MFJ/TAPR	14.95
5100X	Data radio cable - PK-232	14.95 6 ⁹⁵
5100YH	Data radio cable - KPC-9612	14.95
5100YV	Data radio cable - KAM/KPC-3	14.95
5100Z	Data radio cable - PK-88	14.95 2 ⁹⁵
5106	Open end - 6pin mini Ken/Yae cable	4.95
9015	5w 15m CW Xcvr	189.95 169 ⁹⁵
9017	5w 17m CW Xcvr	189.95 169 ⁹⁵
9020	5w 20m CW Xcvr	189.95 169 ⁹⁵
9030	5w 30m CW Xcvr	189.95 169 ⁹⁵
9040	5w 40m CW Xcvr	189.95 169 ⁹⁵
27	Handle for CW station	4.95
412	Plug-in Curtis keyer	39.95
726	Plug-in audio filter	29.95
971	200w portable ant tuner w/meter	99.95
1770	Portable 15m dipole	34.95
1771	Portable 17m dipole	34.95
1772	Portable 20m dipole	34.95
1773	Portable 30m dipole	34.95
1774	Portable 40m dipole	34.95
4110	Portable AC power supply	49.95
4112	Portable power pack	49.95 Dfv
4114	Rechargeable power pack	69.95
91158	9015 Xcvr/tuner/ps/ant	364.80 329 ⁹⁵
91178	9017 Xcvr/tuner/ps/ant	364.80 329 ⁹⁵
91208	9020 Xcvr/971 tuner/4114 ps/1772 ant	364.80 329 ⁹⁵
91308	9030 Xcvr/tuner/ps/ant	364.80 329 ⁹⁵
91408	9040 Xcvr/971 tuner/4114 ps/1774 ant	364.80 329 ⁹⁵
9406X	6m SSB Xcvr w/mic	269.95 249 ⁹⁵
9420X	12w 20m SSB Xcvr w/mic	249.95 229 ⁹⁵
9440X	12w 40m SSB Xcvr w/mic	249.95 229 ⁹⁵
9475X	12w 75m SSB Xcvr w/mic	249.95 229 ⁹⁵
62	Headphone kit	4.95 Dmfv
415	SSB Xcvr CW adapter; 9420X only Dwf	39.95
415B	SSB Xcvr CW adapter; 9420X/9440X	49.95
416	CW adapter for 9406X	39.95
971	200w HF portable ant tuner w/meter	99.95
1776	6m dipole for 9406X	34.95
4110	Portable AC power supply	49.95
4114	Rechargeable power pack	69.95

MG Electronics (MGE)

HFS-1 10w mobile spkr, 3.5mm plug .Δmwf \$ 19.95

MAGELLAN (MAG)

GPS-2000XL	12 ch GPS receiver	\$209.99 149 ⁹⁵
00-09018-000	PC ext power cig cable	14.99
00-69007-000	External power/data module	49.99
00-69038-000	PC kit/Map'n Track CDROM	99.99
GPS ColorTRAK	12 ch color GPS/carry case	391.99 279 ⁹⁵

MAGELLAN - continued

GPS Tracker 12 ch GPS w/wrist strap	321.99	229 ⁹⁵
00-19044-000 Low profile external ant	95.95	
00-19065-000 PC kit/Mag 'n Track CDROM	99.99	
00-19067-000 PC cable w/cig adapter	39.99	
Meridian XL GPS/plot/detach ant/case ....Dmfv	396.65	299 ⁹⁵
Pioneer GPS receiver	139.99	99 ⁹⁵

MAHA (MAH)

AA-FB 1300ma AA NiMH batt cell w/tabs .ea	\$ 3.50	2 ⁹⁵
AA-T 1200ma AA size NiMH batt cell	3.50	2 ⁹⁵
MH-244 Slow charger for 4 max AA NiMH ..	11.95	
MH-BP-7 900ma 13.8v lcom nickel hydride ..	69.95	
MH-BP-8 1200ma 8.4v lcom nickel hydride ..	59.95	
MH-BP-8H 1800ma 8.4v lcom nickel hydride ..	69.95	
MH-BP-83 1200ma 7.2v lcom nickel hydride ..	49.95	
MH-BP-132B 1200ma 12v lco blk nick hyd/mic	59.95	
MH-BP-132G 1200ma 12v lco gray nick hyd/mic	59.95	
MH-BP-173 650ma 9.6v lcom nickel hydride ..	69.95	
MH-BP-180 1000ma 7.2v lcom nickel hydride ..	49.95	
MH-BP-199 700ma 6v lcom nickel hydride	55.95	
MH-BP-200 680ma 9.6v lcom nickel hydride ...	59.95	
MH-CNB-152 900ma 12v Sta nickel hydride ..	59.95	
MH-CNB-153 1200ma 7.2v Sta nickel hydride ..	49.95	
MH-FNB-12 900ma 12v Yaesu nickel hydride ..	59.95	
MH-FNB-17 900ma 7.2v Yaesu nickel hydride ..	49.95	
MH-FNB-27 900ma 12v Yaesu nickel hydride ..	59.95	
MH-FNB-31 650ma 4.8v Yaesu nickel hydride ..	49.95	
MH-FNB-38 650ma 9.6v Yaesu nickel hydride ..	59.95	
MH-FNB-40H 650ma 7.2v Yae nick hyd/ spg clip	59.95	
MH-FNB-41 900ma 9.6v Yae nick hyd/spg clip	55.95	
MH-FNB-V47 1800ma 7.2v Yaesu nickel hyd	69.95	
V47 Belt Clip Spring loaded belt clip for Yae	9.95	
MH-PB-8 1200ma 12v Kenwood nickel hydride ..	62.95	
MH-PB-17 900ma 12v Kenwood nickel hydride ..	69.95	
MH-PB-18 1200ma 7.2v Ken nick hyd; wall cgr only	49.95	
MH-PB-32 900ma 6v Kenwood nickel hydride ..	47.95	
MH-PB-34 900ma 9.6v Kenwood nickel hydride ..	57.95	
MH-C777 Univ cgr/conditioner; nicad/nimh ..	49.95	
MHS-CW4 Clip-leads for external charging ..	3.99	
MH-101-I1 Cgr/lco 157/160/174/131/2/Mah 132B/G	69.95	
MH-101-I3 Cgr/lco 171/172/173/180/Mah BP173	69.95	
MH-101-Y1 Cgr/Yae 101/112/121/75/27/Mah 12/27	69.95	
MH-101-Y2 Cgr/Yae FNB31/38/Mah MFNB38	69.95	
MH-101-Y3 Cgr/Yae 40/41/42/Mah MFNB41	69.95	
MH-800K 500mw spkr/mic w/clip; Kenwood ..	19.95	
MH-800S 500mw spkr/mic/clip; Ali/lco/Sta/Yae	19.95	
MH-800Y 500mw spkr/mic; Yae FT50/VX1R ..	24.95	
MH-A101 5/35w 2m FM amplifier	69.95	
MH-A102 5/35w 2m FM/SSB amp/preamp	89.95	
MH-A103 5/50w 2m FM/SSB amp/preamp	119.95	
MH-A104 5/100w 2m FM/SSB amp/preamp	229.95	
MH-A201 5/45w 2m/15/35w 440 FM amp	159.95	
MH-A301 5/50w 2m HT dock boost amp/pre ..	115.95	
MH-A302 5/45/5/35w 2m/440 HT dock boost ..	165.95	
MHS-I1 lco 2G/02/2/32 adapt; A301/302	9.95	
MHS-I2 lco 2SAT/W2 adapt; A301/302	9.95	
MHS-I3 lco 2GXAT/W21AT adapt; A301/302	9.95	
MHS-I4 lco W32/31/T7/22 adapt; A301/302	11.95	
MHS-K1 Ken 25/26/75/77 adapt; A301/302	9.95	
MHS-K2 Ken TH22/79 adapter; A301/302	9.95	
MHS-S1 ADI/Standard adapter; A301/302	9.95	
MHS-Y1 Yae 23/411E/470 adapt; A301/302	9.95	
MHS-Y2 Yae 26/415/530 adapt; A301/302	9.95	
MHS-Y3 Yae FT11/41/51 adapt; A301/302	11.95	
MHS-Y4 Yae FT10/40/50 adapt; A301/302	11.95	
MH-V0X-K Deluxe VOX spkr/mic for Kenwood	39.95	
MH-V0X-S Dix VOX spkr/mic; Ali/lco/Sta/Yae	39.95	

MALDOL (MAL)

ARD-5B 2m/440 0/3.8db 19.6" mob ant Δmw	\$ 59.99	39 ⁹⁵
ARD-6 2m/440 2.6/4.9db 26.8" mob ..Δmwv	70.99	49 ⁹⁵
ARD-10 2m/440 3.5/5db 34.8" mob ..Δmwv	70.99	49 ⁹⁵
ARD-12 2m/440 4.3/6.8db 48.8" mob Δmwfv	79.99	69 ⁹⁵

MALDOL - continued

ARD-12B Blk 2m/440 4.3/6.8db 48.8"	Δfv	97.99	69 ⁹⁵
ARS-50 6m 1/4 wave 61.2" mobile	Δmwfv	74.99	49 ⁹⁵
ARS-146 2m 4.1db 56" mobile ant	Δwfv	77.99	49 ⁹⁵
ARS-146B Black 2m 4.1db 56" mobile	Δwfv	77.99	49 ⁹⁵
ARS-440 440 5.5db 38.4" mobile ant	Δmwfv	67.99	39 ⁹⁵
ARS-440B Black 5.5db 38.4" mobile	Δmwv	67.99	39 ⁹⁵
EX-110 2m/440 3/5.5db 37.8" mob ant	Δwfv	64.99	39 ⁹⁵
EX-110B Blk 2m/440 3/5.5db 37.8"	Δf	64.99	39 ⁹⁵
EX-111 2m/440 3.6/6db 44" mobile	Δmwfv	77.99	49 ⁹⁵
EX-111B Blk 2m/440 3.6/6db 44"	Δwfv	77.99	49 ⁹⁵
FA-50 2m/440 2.15/3.2db 18.8" mag	Δmw	51.99	39 ⁹⁵
FR-30 2m/440 15" flexible tele whip	Δm	52.99	39 ⁹⁵
HS-702S 2m/440 0/3.2db 17.6" duck	Δm	19.99	
VM-2HP 2m 43.2" 3db 300w mobile	Δmw	47.99	29 ⁹⁵
VM-144HP 2m 71.6" 4.5db 200w	Δmw	60.99	39 ⁹⁵
VM-727CR 2m/440 41.6" 3.8/6.2db	Δmf	67.99	39 ⁹⁵
VM-727HP 2m/440 36" 3/5.5db 300w	Δmwfv	53.99	39 ⁹⁵

MIDLAND (MID)

23-505 1.5-150MHz dual meter SWR/power . \$ 24.95

MIRAGE (MIR)

A-10156	50-52 FM/SSB 10/150w amp/preamp	\$389.00	349 ⁹⁵
B-236	2m FM/SSB 2/30w amp/preamp ....Df	169.00	109 ⁹⁵
B-34	2m FM 2/35w amplifier	69.95	
B-34G	2m FM/SSB 3.5/35w amp/preamp	89.95	
B-556	2m FM 50w amp for handheld	118.95	109 ⁹⁵
B-2156	2m FM/SSB 2/150w amp/preamp	379.00	339 ⁹⁵
B-3106	2m FM/SSB 4/100w amp/preamp	199.00	179 ⁹⁵
B-3206	2m FM/SSB 50/200w amp/preamp	449.95	399 ⁹⁵
B-5106	Dlx 100w 2m FM amp for HT/mobile	229.95	209 ⁹⁵
B-10166	2m FM/SSB 10/160w amp/preamp	379.00	339 ⁹⁵
B-10306	2m FM/SSB 10/300w amp/preamp	689.00	619 ⁹⁵
B-25166	2m FM/SSB 25/160w amp/preamp	299.00	269 ⁹⁵
B-25306	2m FM/SSB 25/300w amp/preamp	689.00	619 ⁹⁵
B-50166	2m FM/SSB 50/160w amp/preamp	299.00	269 ⁹⁵
B-50306	2m FM/SSB 50/300w amp/preamp ..	669.00	599 ⁹⁵
BD-35	2m/440 3/45/4/35w HT amp	159.95	149 ⁹⁵
B-246	5/50w 2m HT dock boost amp/pre	114.95	
BD-25	5/45/5/35w 2m/440 HT dock boost	164.95	
MI-1	lco 2G/02/2/32 adapter, B24G/BD25 ..	9.95	
MI-2	lco 2SAT/W2 adapter; B24G/BD25	9.95	
MI-3	lco 2GXAT/W21AT adapt; B24G/BD25 ..	9.95	
MI-4	lco W32/31/T7/22 adapt; B24G/BD25 ..	9.95	
MK-1	Ken 25/26/75/77 adapt; B24G/BD25 ..	9.95	
MK-2	Ken 22/79 adapter; B24G/BD25	9.95	
MS-1	ADI/Standard adapter; B24G/BD25 ..	9.95	
MY-1	Yae 23/411E/470 adapt; B24G/BD25 ..	9.95	
MY-2	Yae 26/415/530 adapt; B24G/BD25 ..	9.95	
MY-3	Yae FT11/41/51 adapt; B24G/BD25 ..	9.95	
MY-4	Yae FT10/40/50 adapt; B24G/BD25 ..	9.95	

C-226 220 FM/SSB 2/20w amp/preamp	169.00	154 ⁹⁵
C-2116 220 FM/SSB 2/110w amp/pre	339.00	299 ⁹⁵
C-1066 220 FM/SSB 10/60w amp/preamp ..	239.00	214 ⁹⁵
C-10126 220 FM/SSB 10/120w amp/preamp	339.00	299 ⁹⁵
C-10226 220 FM/SSB 10/220w amp/preamp	655.00	589 ⁹⁵
C-25126 220 FM/SSB 25/120w amp/preamp	315.00	289 ⁹⁵
C-25226 220 FM/SSB 25/200w amp/preamp	655.00	589 ⁹⁵
C-50126 220 FM/SSB 50/120w amp/pre Δmw	334.00	259 ⁹⁵
C-50226 220 FM/SSB 50/200w amp/preamp	639.00	579 ⁹⁵
D-15N 430 FM/SSB/ATV 2/15w type N amp ..	189.00	169 ⁹⁵
D-26N 440 FM/SSB 2/60w type N amplifier ..	269.00	244 ⁹⁵
D-1010N 440 FM/SSB 10/100w type N amp ..	395.00	354 ⁹⁵
D-3010N 440 FM/SSB 30/100w type N amp ..	365.00	329 ⁹⁵
D-1010-ATVN 430 ATV 10/100w type N amp ..	414.00	369 ⁹⁵
RC-1* Remote control head w/18" cable	45.95	

*Not for B-23/C-22/D-26

The following Repeater Amplifiers are available on Special Order. Specify SO-239 or type N connectors

A-1015NR 6m FM 2/80w type N amplifier	\$599.00	539 ⁹⁵
A-1015R 6m FM 2/80w SO-239 amplifier †m	579.00	469 ⁹⁵
B-215NR 2m FM 1/110w type N amplifier	579.00	524 ⁹⁵
B-215R 2m FM 1/110w SO-239 amplifier	559.00	504 ⁹⁵
B-1016NR 2m FM 2/120w type N amplifier ..	619.00	559 ⁹⁵

MIRAGE - continued

B-1016R 2m FM 2/120w SO-239 amplifier ...	599.00	539 ⁹⁵
B-2516NR 2m FM 12/120w type N amplifier	569.00	519 ⁹⁵
B-2516R 2m FM 12/120w SO-239 amplifier .	549.00	499 ⁹⁵
C-211NR 220 FM .5/80w type N amplifier	649.00	584 ⁹⁵
C-211R 220 FM .5/80w SO-239 amplifier	629.00	564 ⁹⁵
C-1012NR 220 FM 5/90w type N amplifier	649.00	584 ⁹⁵
C-1012R 220 FM 5/90w SO-239 amplifier	629.00	564 ⁹⁵
C-2512NR 220 FM 15/90w type N amplifier ..	615.00	559 ⁹⁵
C-2512R 220 FM 15/90w SO-239 amplifier ..	595.00	539 ⁹⁵
D-1010NR 440 FM 4/80w type N amplifier	654.00	589 ⁹⁵
D-3010NR 440 FM 12/80w type N amplifier ..	625.00	564 ⁹⁵
D-1010-ATVN-R 430 ATV 4/80w type N amp .	654.00	589 ⁹⁵

PREAMPS

KP-1/10M 10m in shack preamp	\$139.00	129 ⁹⁵
KP-1/6M 6m in shack preamp	139.00	129 ⁹⁵
KP-1/2M 2m in shack preamp	139.00	129 ⁹⁵
KP-1/220 220 in shack preamp	139.00	129 ⁹⁵
KP-1/440 440 in shack preamp	139.00	129 ⁹⁵
KP-2/10M 10m mast mount preamp	195.00	179 ⁹⁵
KP-2/6M 6m mast mount preamp	195.00	179 ⁹⁵
KP-2/2M 2m mast mount preamp	195.00	179 ⁹⁵
KP-2/220 220 mast mount preamp	195.00	179 ⁹⁵
KP-2/440 440 mast mount preamp	195.00	179 ⁹⁵

WATTMETERS

MP-1 160-10m 25/200/2kw PEP wattmeter .	\$235.00	219 ⁹⁵
MP-2 6 & 2m 50/500/1.5kw PEP wattmeter .	235.00	219 ⁹⁵
MP-3 420-450 5/50/500w PEP wattmeter	265.00	249 ⁹⁵
MP-4 1.2 GHz 1/10/100w PEP wattmeter	279.00	259 ⁹⁵

NCG (NCG)

BB-516 Motorcycle intercom set	\$ 89.95	
BJP-514K Motorcycle earphone/mic; Kenwood	69.95	
EN-921K Spkr/mic earpiece; Kenwood .....Df	44.95	29 ⁹⁵
MC-910 Ear/bm mic w/cap-clip/ear hook; not Ken	49.95	
MC-910K Ear/bm mic w/cap-clip/ear hook; Ken HT	49.95	
MH-900PK Earpc/bm mic/PTT; Ken HT Dmfv	39.95	24 ⁹⁵
MP-28 Boom mic/headset/PTT; all HT but Ken	39.95	
MP-28K Boom mic/headset/PTT for Ken HT ...	39.95	
NCG-2050 1.6-60MHz 30/300/3kw meter	149.95	129 ⁹⁵
NCG-3000 118-530MHz 5/20/200w PEP meter	109.95	99 ⁹⁵

Power Pocket 12v 2AH lead acid batt/cgr	66.95	
RP-150 20A variable ps/lighted meters/fan .	169.95	159 ⁹⁵
RP-300 30A variable ps/lighted meters/fan .	259.00	239 ⁹⁵

NAVAL (NAV)

HTS-3 5-15vdc amplified speaker	\$ 29.95	
MK-303 Earphone/PTT/mic; lcom HT's	Δv	14.95 4 ⁹⁵

NEW WAVE (NEW)

Adventurer 12' extended Portaple alum mast m	\$109.95	
Traveler 19' extended Portaple alum mast .m	124.95	
Rover 26' extended Portaple alum mast ....m	149.95	
Expeditioner 33' extended Portaple alum mast m	174.95	
Explorer 40' extended Portaple alum mast m	199.95	
Big Foot Welded, unpainted park-on mt. .m	119.95	
Snap-on Mount Clamp on mt; ant-mast m	19.95	

NORCOMM (NOR)

NC-101 Tunable CTCSS encoder	\$ 19.95	
NC-104 Programmable CTCSS encoder	24.95	
NC-106 Prog CTCSS encoder/decoder	54.95	
NC-401 Sub-miniature DTMF decoder	59.95	

NYE VIKING (NYE)

ANTENNA TUNERS AND ACCESSORIES

MBV-A 3kw tuner with ant switch & meters .	\$879.95	
MBV-B As MBV-A, without meters	Δfv	760.95 649
020-001 2kw low-pass filter		56.95

MASTER KEY

330-001 Black enamel base w/cable, plug ...	\$ 72.95	
330-C Chrome plated Master Key/cable/plug	139.95	

HEAVY DUTY SPEED-X KEYS WITH NAVY KNOBS

320-001 No shorting switch	\$ 44.95	
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PRICE LIST

NYE - continued

320-003	As above, w/shorting switch	51.95
322-001	Brass hardware, no switch	35.95
322-003	As above, w/shorting switch	44.95

STANDARD SPEED-X KEYS

310-001	Black, no shorting switch	\$ 40.95
310-003	As above, w/shorting switch	45.95
312-001	Brass arm, no shorting switch	32.95
312-003	As above, w/shorting switch	39.95

Oak Bay Technologies (OAK)

AM-101B	BNC buck window mount	\$ 24.95
BS-25	Automatic car battery saver module ..	39.95
CA-232HH	Handheld packet cable	34.95
CA-232U	Universal packet cable	34.95
LP-11P	1.8-30 MHz 1kw low-pass filter	69.95
LP-50	1.8-54 MHz 1kw low-pass filter	69.95
PS-612M	Hvy duty DC pwr strip w/breakers ..	64.95

Optoelectronics (OPT)

R-10	30-2000MHz FM Interceptor	Df \$299.00	249 ⁹⁵
Climate	Windshield mt; Scout/400	Δmwfv	25.00
Spectrum	FCC data CDROM/Scout prog	Δm	29.00
SSB-220A	SSB/gen purp 3GHz bench ctr	Δwfv	329.00
BLP-70	Low pass receiving filter	Δw	30.00
CB-232	PC interface cable	Δmwfv	49.00
Optolog	Software; 8040/SSB-220A	Δmwfv	25.00

OUTBACKER (OUT)

OB-8	300w PEP 6' 75-10m 8-band mobile ant	\$279.95
OB-8HP	500w PEP 6' 75-10m 8-band mob ant	299.95
OB-SB	8-band 300w PEP split ant/storage bag	299.95
OB-8TRI	3-pc 300w PEP 6' 8-band port ant ..	329.95
OB-M	300w PEP 6' 75/40/20/17/10m/HF marine	429.95
Perth	150w PEP 7.5' 75-10m mobile ant	289.95
Perth Plus	150w PEP 75-10m+6m/2m mob ant	299.95
Stealth Plus	100w PEP 4' 75-10m+6/2m ant	269.95
Outreach	300w PEP 12' 160-10m mobile ant	399.95
Outreach 500	600w PEP 12' 80-6m mob	439.95
Outrunner	300w PEP 9' 9-band mobile ant ..	349.95
ALP Outpost	Base tripod mtg sys for mob ant	199.95
OB-360	Tnk mt/spring/coax; Perth/JR8/Perth Plus	99.95
OB-SB	¾-24 spring and ¾" hole base	99.95
Diamond K-400-3/8C	¾-24 trunk mt, 6' coax	69.95
Diamond C-110	10' ext cable; K-400-3/8C	14.95

PACCOMM (PAC)

APRS port switch	\$ 29.95
BayMod-25 Modem	45.95
HandiPacket Small TNC for handhelds ..	229.95
PicoPacket TNC, 128K RAM	149.95
PicoPacket battery model TNC, 128K RAM ..	209.95
PicoPacket dual serial port TNC, 128K RAM ..	199.95
Spirit-2 Standard high performance controller	239.95
Tiny-2 Mk-2 Multi-purpose TNC	149.95
Tiny-2 Mk-2/GPS TNC w/GPS & mag GPS ant	499.95

Palomar Engineers (PAL)

FER-2	RF ferrite toroid kit	\$ 25.95
LA-1	Loop amplifier; matches loop to Rcvr ..	99.95
5-15 MHz	plug-in loop (HF-1)	99.95
1.6-5 MHz	plug-in loop (160m, 80m)	99.95
.55-1.6 MHz	plug-in loop (AM broadcast)	99.95
150-550 KHz	plug-in loop (LF, 1750m)	99.95
40-150 KHz	plug-in loop (VWVB, Loran)	99.95
M-840	Bar graph HF auto SWR/power meter ..	199.95
PS-95	AC adapter for M-835/840	15.95
MDB-2	Mag dipole receiving balun	39.95
MSB-3	Magnetic switch receive balun	135.00
P-405	1.8-54MHz 20db 9v Rcvr preamp	149.95
P-508	2-30MHz 12v active Rcvr preamp	99.95
PCM-1	1-30MHz RF current meter	135.00
PFS-1	1.8-150MHz field strength meter	195.00
PK-203	Brass Jones single lever key	230.00
PT-340	Tuner-Tuner (use with ant tuner)	99.95
RFI-3	RF interference kit	20.95

PALOMAR ENG - continued

RFI-4	RF interference kit	25.95
SB-4	2kw 1.7-30 MHz 4:1 balun/SO-239	89.95
SMB-5	SmartBridge prog; ADI computers	29.95
VLF-A	VLF converter; 10-500 KHz to 80m	89.95
VLF-S	VLF conv; 10-500 KHz to 4-4.5 MHz	89.95
PAR (PAR)		
OA-28	10m horizontal omni antenna	\$ 74.95
OA-50	6m horizontal omni antenna	63.95
OA-144	2m horizontal omni antenna	54.95
OA-222	220 horizontal omni antenna	54.95
OA-432	430 horizontal omni antenna	54.95
UHFDN450	440 dual band notch filter	62.95
VHFDN152	2m dual band notch filter	62.95
VHFDN152HT	2m dual band HT notch filter	68.95
VHFTN152-158	2m dual band+pager notch fil	82.95
UHF-12	12" RG58/silver/gold/tef PL259s ..	9.95

PATCOMM (PAT)

PC-16000	HF Xcv/dig modem/kybrd	Δmwfv	1649.00
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PENETROX (PEN)

Penetrox A	4 oz tube for antennas	\$ 12.95
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PERCON (PEC)

Spectrum	FCC database CDROM	Δmwfv	\$ 29.95
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PERIPHEX (PER)

BP-3	8.4v 350ma battery for lcom	Δw	\$ 48.95
BP-114S	12v 800ma battery for lcom	Δw	83.95
BP-132	12v 600ma battery for lcom	Δmwfv	51.80
BP-132A	12v 600ma batt for lcom	Δmw	51.80
CNB-152	12v 600ma batt; Standard	Δmf	41.95
CNB-153	7.2v 1100ma batt; Standard	Δv	44.95
EBP-34	4.8v 1200ma batt for Alinco	Δmwfv	42.40
EBP-34S	4.8v 1700ma batt; Alinco	Δmw	46.40
EBP-35	7.2v 900ma batt for Alinco	Δmwfv	65.95
FNB-11	12v 800ma battery for Yaesu	Δwv	65.95
FNB-12	12v 600ma battery for Yaesu	Δw	43.95
FNB-14	7.2v 1100ma batt for Yaesu	Δwfv	42.95
FNB-14S	7.2v 1700ma batt for Yae	Δmwfv	65.95
FNB-26	7.2v 1100ma batt for Yaesu	Δmw	45.95
FNB-26S	7.2v 1700ma batt for Yae	Δmw	45.95
FNB-27S	12v 800ma batt for Yaesu	Δw	65.95
FNB-33	4.8v 1700ma batt for Yaesu	Δmwfv	37.50
FNB-35	7.2v 600ma batt for Yaesu	Δmwfv	46.40
FNB-38	9.6v 650ma batt for Yaesu	Δwfv	64.80
PB-7S	7.2v 1700ma batt for Ken	Δw	59.95
PB-8S	12v 800ma battery; Kenwood	Δw	59.95
PB-17	12v 800ma battery; Kenwood	Δw	50.95
Santec ST-142	9.6v 600ma batt; ST142 Dmwfv		24.95

PHILIPS (PHI)

U-105	Light duty rotor	\$ 69.95
TB-105	Thrust bearing	18.95

PIPO TOUCH-TONE PADS (PIP)

PK-1	12-digit pad	m	\$ 71.95
PK-1K	12-digit pad w/delay relay	m	78.95
PK-1M	12-digit pad for surface mtg	m	71.95
PK-2	16-digit pad	m	76.95
PK-2K	16-digit pad w/delay relay	m	83.95
PK-2M	16-digit pad for surface mtg	m	76.95

POLYPHASER (PLY)

LIGHTNING PROTECTION

IS-SUNX-C2	125-1000 375/125/50w N flange	\$ 61.95
IS-SUNX-CU	1.5-400 2kw/375/125w flange mt	61.95
IS-SUNX-C1	50-700MHz 375/125w flange mt	61.95
IS-B50LN-C2	125-1000 375/125/50w N bulkhead	64.95
IS-B50LU-CU	1.5-400 2kw/375/125w bulkhead	64.95
IS-B50LU-C1	50-700 375/125w bulkhead mt	64.95
IS-IE50LU-CU	1.5-400 dlx 2kw/375/125w bulk	129.95
IS-IE50LU-C1	50-500 dlx 375/125w bulkhead	129.95
IS-IE50LN-C1	50-700 dlx 375/125w N bulkhead	117.95
BF Adapter	Bulkhead to flange mt adapter ..	9.95
FB Adapter	Flange to bulkhead mt adapter ..	11.95

POLYPHASER - continued

IS-PLD0-120-15A	120v 15A power protector	172.95
IS-PLD0-120-20A	120v 20A power protector	215.95
IS-RCT	8-wire rotor control protector	54.95
J-1	1/2" to 1 1/2" bronze transition clamp ..	8.95
J-2	1 1/2" to 2 1/4" bronze transition clamp ..	12.95
IS-SPTL	Single phone line protector	57.95
CS112-25	25' 1 1/2" copper strap	25.95
CS112-50	50' 1 1/2" copper strap	51.95
CS112-75	75' 1 1/2" copper strap	75.95
CS112-100	100' 1 1/2" copper strap	100.95
CS3-25	25' 3" copper strap	51.95
CS3-50	50' 3" copper strap	100.95
CS3-75	75' 3" copper strap	150.95
CS3-100	100' 3" copper strap	197.95
CS6-25	25' 6" copper strap	100.95
CS6-50	50' 6" copper strap	197.95
CS6-75	75' 6" copper strap	299.95
CS6-100	100' 6" copper strap	391.95
CU-SPGP	Copper single point ground panel ..	69.95
TK-2	1 1/2" strap to Rohm trn corrosion free clamp	5.95
TK-3	1 1/2" strap-2 1/4" to 3 1/4" mast corr free clamp	8.95
1C-112S	#6-#1 wire to 1 1/2" strap clamp bond	10.95
20C-112S	#2-0 to #4-0 1 1/2" strap clamp bond Dvw	10.95
58R-112S	1 1/2" strap to 3/8" gnd rod clamp bond	12.95
MSC-3	Junc; 2+ 1 1/2" or 3" strap clamp bond	10.95
UNI-KIT 2CT	Gnd kit; coax to alum/tin/galv ..	29.95
UNI-KIT 2TC	Gnd kit; galv trn leg to copper ..	32.95
UNI-KIT 2CC	Ground kit; coax to copper	28.95
CKK	Copper cleaning kit; 4 oz can, brush ..	27.95
GLEP	Lightning and EMP Protection book ..	22.95
The POUCH (POU)		
1R	Pouch for Yaesu VX-1R	\$ 14.95
10R	Pouch for Yaesu FT-10/40/50R	14.95
50R	Pouch for Icom Q7/Sta C-108A/508A ..	14.95
510	Pouch for Icom IC-T8A/Sta C-510A	14.95
G-71	Pouch for Kenwood TH-G71A	17.95
P-4V	Pouch for UBZ-LF14 FRS	14.95
P-5	Pouch for HT	17.95
S-1	Short 1 Pouch for HT	17.95
S-2	Short 2 Pouch for HT	17.95
S-3	Short 3 Pouch for HT	17.95
Slim	Slim Pouch for HT	17.95
SS	Pouch for TH22AT/TH28A/FT51R&HP ..	17.95
T-2A	Pouch for HT	17.95
XF-1	Pouch for Yaesu VXF-1 FRS	14.95
Chest B/S	Chestpouch ser B w/s pocket	29.95

PREMIER (PRE)

AL-800	2m/440 32" BNC rubber duck ant ..	\$ 34.95
RD-8	2m/440 6.5' BNC duck	17.95
RD-9	2m/440/900 7" BNC duck	18.95
RD-9SMA	2m/440/900 7" SMA duck	21.95
RD-78	2m/440 15" BNC whip	22.95
RD-98	2m/440 17" BNC whip	24.95
RD-98SMA	2m/440 17" SMA whip	27.95
PNC-4	2m/440 3/5.5db 40" fold mob Dmwfv	43.95
MC-2	Super suction & mag mt; NMO/UHF ..	37.95
TA-1	UHF UHF-style trunk mt/coax	28.95
TA-2	Hvy dty rubber coat trk mt; NMO/UHF Dmw	34.95
DX-2	2m/440 450/300w dplx/UHF	43.95
DX-2/Lead	2m/440 450/300w dplx/lead	46.95
DX-2MN	2m/440 450/300w dplx/N	43.95
DX-2MNL	2m/440 450/300w dplx/lead/N	46.95
SB-752	12vdc 6.5A port batt power pack ..	59.95
SB-791	5A ps w/cig outlet; not for radio ..	29.95
TX-3	2m/440/900-12 800/800/200w triplr Dmwfv	54.95
SPM-100	Spkr/mic; ADI/Icom/Yaesu	27.95
SPM-101	Speaker/mic for Kenwood	29.95
SPM-102	Speaker/mic for Yaesu FT-50R	33.95
SPM-200	Lapel mic/earph; ADI/Icom/Yaesu ..	18.95
SPM-200E	Lapel mic/earhook; ADI/Ico/Yae ..	21.95
SPM-201	Lapel mic/earphone for Kenwood ..	19.95

PREMIER - continued

SPM-201E	Lapel mic/earhook for Kenwood ...	23.95
SPM-202	Lapel/mic/earphone; Yaesu FT-50R	20.95
SPM-202E	Lapel mic/earhook; Yaesu FT-50R	24.95
SPM-300	Spkr/mic/lock/volume; ADI/Ico/Yae ...	34.95
SPM-301	Spkr/mic/PTT lock/volume; Ken ...	39.95
SPM-400	Boom/mic; ADI/Icom/Yaesu ...	25.95
SPM-401	Boom/mic for Kenwood	27.95
SPM-402	Boom/mic for Yaesu FT-50R	29.95
SPM-500	Throat/mic/earph; ADI/Icom/Yaesu	59.95
SPM-501	Throat/mic/earphone for Kenwood	61.95
SPM-502	Throat/mic/earphone; Yaesu FT-50R	62.95
SPM-600	Full sized spkr/mic; ADI/Ico/Yae ...	39.95
SPM-601	Full sized spkr/mic for Kenwood	39.95
SPM-602	Full sized spkr/mic; Yae FT50R/VX1	39.95

PRO AM by VALOR

VHF/UHF ANTENNAS ONLY (No Mounts)

MO144-440	2m/440 antenna	\$ 21.95
PAQA	136-515 MHz ¼ wave antenna	8.95
PAQ-144	2m ¼ wave antenna	8.95
PAQ-435	440 ¼ wave antenna	8.95
PAQ-3820	2m ¼ wave whip w/ ¼-24 thread	8.95
PUB-144	2m ½ wave 3 db antenna	31.95
PUB-440	440 5 db antenna	39.80

MOUNTS ONLY FOR ABOVE ANTENNAS

PAM	Low profile magnet mount w/coax	\$ 28.95
PAMB	Black low profile mag mount w/coax	28.95
PAN38	¾-24 antenna to NMO mt adapter	19.95
PAS	¾ surface mount w/coax	20.95
PASMO	¾ surface mt only (no coax)	7.95
PAS38	¾ surface mount w/coax	20.95
PAS38MO	¾ surface mt only (no coax)	7.95
PAT-2	No hole trunk mount w/coax	27.95
PAT-2B	Black no hole trunk mount w/coax	27.95
PAT-3	Swivel NMO-style trunk mt w/coax	35.95

OTHER VHF/UHF ANTENNAS & MOUNTS

7BNC	2m/440 12' 0/2.1db BNC rubber duck	\$ 23.95
144BNC	2m 12' ¼ wave rubber duck w/BNC	11.95
220BNC	220 10' ¼ wave rubber duck w/BNC	11.95
450BNC	440 6' ¼ wv rubber duck w/BNC	11.95
BNC-SC	Suction cup extension; rubber ducks	22.95
WMSL-BNC	Window clip for rubber ducks	42.95
82BNC	Magnet mt for BNC w/coax	27.95
101ADN	HD alum mirror mt w/SO-239	10.95
301	¾-24 magnet mt only w/coax	25.95
401	Low profile ¾-24 mag mt only w/coax	31.95
DAK	Mt for 2 vert ants or horizontal dipole	13.95
GM-100AD	SS GM ¾-24 mirror mt w/SO-239	9.95
GM-144	2m 2.5db on glass antenna	44.95
GM-270	2m/440 2.6/6.3db on glass antenna	59.95
TGMKD	On glass replacement mtg kit	8.95
MM-3401	Maxi-mag mt ¼-24 kit (3-5" mags)	59.95
MM-3401B	Blk maxi-mag mt ¼-24 kit (3-5" mags)	59.95
SS-100MOT	3-way NMO mirror mt w/coax	23.95

CX-144/CX-144B	2m ¼ wave 3db ¾-24 whip	17.95
MM-270B	2m/440 mini mag mt ant w/BNC	56.95
PA-144M	6m/2m 49' 0/3db mag mt ant	19.95
PA-220M	220 30' 3db mag mt ant	19.95
PA-270M	2m/440 19' 0/2.1db mag mt ant	19.95
PA-440M	440 22' 4db mag mt ant	19.95
PAQM	144-450 MHz ¼ wave BNC mag ant	28.95
PM-144-440BN	2m/440 BNC mag mt ant	33.95
TGS	30-1200MHz on-glass scanner ant	48.95
VAA-002	144-450 ¼ wave mag ant	23.95
VAA-002BN	144-450 ¼ wv BNC mag ant	27.95
VAA-002B	144-450 black ¼ wv mag mt ant	23.95
VAA-002BBN	144-450 black ¼ wv BNC mag ant	27.95
120	Sawtooth hump mt for mobile radios	7.95
D-270	2m/440 100w duplexer	45.95
DB-240	2m/440 base station antenna	105.20

MOBILE HF ANTENNAS (No Mounts)

AB-5	75/40/20/15/10m antenna	\$119.95
PHF-160	160m 8' ¼-24 whip	97.95

Reg Sale

PRO AM - continued

PHF-75	75m 8' ¼-24 whip (4' coil, 4' whip)	29.95
PHF-40	40m 8' ¼-24 whip (4' coil, 4' whip)	23.95
PHF-30	30m 8' ¼-24 whip (4' coil, 4' whip)	23.95
PHF-20	20m 8' ¼-24 whip (4' coil, 4' whip)	23.95
PHF-17	17m 8' ¼-24 whip (4' coil, 4' whip)	23.95
PHF-15	15m 8' ¼-24 whip (4' coil, 4' whip)	23.95
PHF-12	12m 8' ¼-24 whip (4' coil, 4' whip)	23.95
PHF-10	10m 8' ¼-24 whip (4' coil, 4' whip)	23.95
PHF-6	6m 58" ¼-24 whip	23.95

QSL Card Holders (ART)

QSL Card Holders, pack of 3, 20 cards/holder \$ 12.95

RF APPLICATIONS (RFA)

P-1500	1.8-30 MHz digital power/SWR meter	\$199.95
P-1500-P	Power supply for P-1500	16.95
P-2000A	1.8-30 MHz dig power/SWR meter	299.95
P-2000CW	1.8-30 MHz audible (CW) meter	249.95
P-3000	Deluxe 1.8-30MHz digital power/SWR	299.95
P-3000-P	Power supply for P-3000, etc.	12.95
Match Alert	VSWR monitor/alarm	129.95

RF CONCEPTS (RFC)

144	2m FM mini-amp 2/30w amp	\$119.95	89 ⁹⁵
144P	2m FM mini-amp 2/30w amp/pre	139.95	109 ⁹⁵
VHF1-60	2m 1/60w FM HT amplifier	249.95	179 ⁹⁵
2-23	2m FM/SSB 2/30w amp/pre	149.95	79 ⁹⁵
MAX-AMP-10	2m FM/SSB 10/150w amp/pre	359.95	269 ⁹⁵
MAX-AMP-45	45m FM/SSB 45/150w amp/pre	329.95	249 ⁹⁵
2/70	2m/440 FM 3/30/5/20w HT amp	259.95	189 ⁹⁵
440P	440 FM mini-amp 3/20w amp/pre	169.95	129 ⁹⁵
UHF-50	440 3/50w FM HT type N amp	299.95	219 ⁹⁵
4-110	440 FM 10/100w N amp/preamp	399.95	299 ⁹⁵
4-310	440 FM 30/100w N amp/pre	369.95	279 ⁹⁵

RF INQUIRY (RFI)

CF250E-UHF	250w 1.8-70 common mode filter	\$ 89.95
CF5KV-UHF	5kw 1.8-70 common mode filter	124.95

RF LIMITED (RFL)

DF-4000	4kw PEP low pass filter	\$159.95	89 ⁹⁵
DF-7000	7kw PEP low pass filter	179.95	99 ⁹⁵
HL-35NP	2m .5-5/20-35w amplifier	89.95	49 ⁹⁵
HL-35V	2m .5-5/20-35w amp/preamp	119.95	69 ⁹⁵
HL-36U	440 .5-12/30w amplifier	259.95	149 ⁹⁵

RF PARTS (See Diamond)

RF PRODUCTS (RFP)

199-416	BNC mag mt, 10' coax w/BNC	\$ 17.95
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RMS (RMS)

CN-220	1.8-225MHz 1.5kw PEP meter	\$144.99	89 ⁹⁵
PA-546	2m 5/45w amplifier	129.99	69 ⁹⁵
W-450	140-170/430-470 150w meter	69.99	39 ⁹⁵

RACOM (RCO)

700	Automatic morse code identifier	\$ 92.95	79 ⁹⁵
700-PC	Programming kit	30.95	24 ⁹⁵

Radio Amateur Callbook (RAC)

077977	1997 World Radio TV HB	\$ 24.95	14 ⁹⁵
077985	1998 World Radio TV Handbook	24.95	
087565	1999 N America/International CB callbook	49.95	

RADIO PUBLICATIONS

087034	All About Cubical Quad Antennas	\$ 13.95
087042	Beam Antenna Handbook	13.95
087050	All About VHF Amateur Radio	13.95
087069	Radio Amateur Antenna Handbook	13.95
087077	Simple, Low Cost Wire Antennas	13.95
087093	Interference Handbook	13.95
087107	All About Vertical Antennas	13.95

RAMSEY (RAM)

AA-7	Active antenna kit	\$ 28.95
AF-1	Hi-Q CW audio filter kit	34.95
AR-1	Aircraft receiver kit	29.95

RAMSEY - continued

CS-1	Crystal radio set kit	19.95
CW-7	CMOS keyer kit	24.95
DF-1	Foxhound direction finder kit	59.95
DN-1	Nicad conditioner/fast charger kit	49.95
FM-1	300' FM broadcast transmitter kit	5.95
FM-4	Hi power FM broadcast transmitter kit	14.95
FR-1	FM broadcast receiver kit	24.95
HR-20	20m receiver kit	29.95
HR-40	40m receiver kit	29.95
HR-80	80m receiver kit	29.95
PR-10	2m preamp kit	17.95
QRP-20	20m CW transmitter kit	29.95
QRP-40	40m CW transmitter kit	29.95
QRP-80	80m CW transmitter kit	29.95
RFS-1	RF sensed switch kit	14.95
SCA-1	SCA decoder kit	27.95
SR-1	Shortwave receiver kit	29.95
TS-1	CW touch paddle switch kit	6.95
UT-5	Universal timer kit	8.95
V5-1	Voice activated switch kit	6.95
VS-10	BNC telescopic whip antenna	12.95

ROHN TOWERS (ROH)

HBX-40/BXB-6	40' twr/base stubs, 10 sq ft *T	\$544.50	490 ⁹⁵
HBX-48/BXB-7	48' twr/base stubs, 10 sq ft *T	726.60	653 ⁹⁵
HBX-56/BXB-8	56' twr/base stubs, 10 sq ft *T	911.30	820 ⁹⁵
HDBX-40/BXB-7	40' twr/base stubs, 18 sq ft *T	680.60	612 ⁹⁵
HDBX-48/BXB-8	48' twr/base stubs, 18 sq ft *T	907.30	816 ⁹⁵

*Drop-shipped from factory

On factory drop-shippings we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB the Rohn factory, which has various locations, via truck. COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these drop-shipped towers. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

Note: Rohn states that "antennas developing a large twisting moment due to wind must not be used on HBX/HDBX-series towers. Antennas should be limited to those having a maximum boom length of 10 ft.

Other Rohn Towers available on Special Order

ROSETTA (ROS)

WINRAD1	.5M-1.3G Rcv card/soft/cbl bld	\$699.95	399 ⁹⁵
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SGC (SGC)

04-01	SG-2000 150w 1.8-30 MHz 12v Xcvr	1695.00	1429 ⁹⁵
04-06	SG-2000 Slim Pack Xcvr (no head)	1595.00	1339 ⁹⁵
04-11	Std SG-2000 rem head/bkt/20' cable	695.00	589 ⁹⁵
04-15	Remote mobile head/mem ch's only	495.00	399 ⁹⁵
04-10	SG-2000 Xcvr w/DSP/PowerTalk head	1995.00	1679 ⁹⁵
04-23	SG-2000 Xcvr/DSP/PowerTalk remotd	2295.00	1899 ⁹⁵
04-12	Remote kit w/swivel bkt & cable	200.00	179 ⁹⁵
04-13	Remote kit w/5-way mount & cable	350.00	319 ⁹⁵
04-14	Rem kit w/suction cup mt & cable	495.00	449 ⁹⁵
04-22	PowerTalk remote head	1095.00	799 ⁹⁵
51-81	Fan kit for continuous duty xmit	300.00	269 ⁹⁵
52-1	Waterproof military handset	375.00	339 ⁹⁵
52-32	Telephone handset	190.00	174 ⁹⁵
52-34	RS-232C interface; SG-2000 Xcvr	195.00	179 ⁹⁵
52-47	Shock/military mounting tray	300.00	269 ⁹⁵
52-51	CA-1 High voltage feed wire .per ft.	79¢	
52-52	CA-2 RG-58 coax cable .per ft.	99¢	
52-53	CA-230 Ant coupler cable .per ft.	4.95	
52-54	CA-2000 Remote head cable per ft.	4.95	
53-04	PS-30 30A/40A peak unreg ps	425.00	399 ⁹⁵
53-05	PS-50 50A/70A peak unreg ps	459.50	419 ⁹⁵
52-61	PSC/12-1 12' ps cable, 1 plug	50.95	
52-62	PSC/12-2 12' ps cable, 2 plugs	60.95	
05-01	SG-2000 Mini 20w PEP QRP Xcvr/mic	675.95	
52-96	SG-500 1.8-24MHz 12v 500w PEP amp	1195.00	999 ⁹⁵
56-40	SG-7200 DSP HF Smartmode/Emailer	695.95	
70-07	PowerClear add-on DSP unit	395.00	359 ⁹⁵

PRICE LIST

SGC - continued

54-12 SG-230 200w 1.8-30 MHz 12v Smartuner	595.00	489 ⁹⁵
54-61 25' extension cable	60.95	
54-62 50' extension cable	90.95	
54-63 SmartLock; tuners made after 9/1/93	59.95	
54-15 SG-235 500w 1.8-30MHz 12v Smartuner	1595.00	1169 ⁹⁵
54-16 SmartPro 200w 1.6-30MHz 12v tuner +	995.00	599 ⁹⁵
54-17 SG-231 HF+6m 12v Smartuner	595.00	529 ⁹⁵
54-04 SG-103 1.8-30MHz 150w dipole	249.50	229 ⁹⁵
55-06 SG-104 2-28 MHz 90' 1kw dipole	700.00	629 ⁹⁵
55-27 SG-303 1.8-30 9' mobile whip & mt.	495.00	449 ⁹⁵
55-67 Replacement whip for SG-303	225.00	199 ⁹⁵
55-28 SG-307 1.8-60 7' mobile whip & mt.	345.00	319 ⁹⁵
55-45 QMS Quick universal mt system ...Δm	490.00	399 ⁹⁵
55-46 QMS-1 Quick mt system w/SG230 Dm	1085.00	749 ⁹⁵
55-47 QMS-2 Quick mt sys w/SG-230/303 whip	1580.00	895 ⁹⁵
55-48 QMS-3 500w antenna system	2580.00	2169 ⁹⁵
55-49 QMS-7 Quick mt sys w/SG-231/307 whip	1430.00	1299 ⁹⁵
56-15 External ARQ/FEC system	1200.00	1069 ⁹⁵

SANGEAN (SAN)

ATS-303 AM/FM/shortwave portable receiver	\$119.00	89 ⁹⁵
ATS-404 AM/FM/SW portable receiver w/case	139.95	99 ⁹⁵
ATS-606A AM/FM/shortwave portable receiver	249.00	169 ⁹⁵
ATS-818 AM/FM/shortwave portable receiver	299.00	179 ⁹⁵
ATS-818CS AM/FM/SW port Rcvr w/cassette	359.00	229 ⁹⁵
ATS-909 AM/FM/shortwave portable receiver	389.00	279 ⁹⁵
DT-200V AM/FM/VHF TV sound dig port Rcvr	79.95	
SR-77 AM/FM micro sized receiver	34.95	

SEQUIA (SEQ)

POCKET PC REF Pocket PC reference book	\$ 14.95	
POCKET REF Pocket reference book	9.95	

SHURE (SHU)

5267 Series II Dynamic amplified desk mic	\$129.00	119 ⁹⁵
R96 Replacement cartridge	26.95	

SMILEY ANTENNA (SMI)

270A 2m/440 gain telescopic whip	\$ 19.95	
270A/SMA 2m/440 gain tele whip w/SMA	19.95	
5/8 SLD-2 2m ½ w Slim Duck rubber ant	17.95	
5/8 SLD-220 220 ½ Slim Duck rubber ant	17.95	
5/8 SLD-440 440 ½ Slim Duck rubber ant	17.95	
5/8 SLD-2 Combo 2m ½ duck & stubby ant	24.95	
5/8 SLD-220 Combo 220 ½ duck & stubby ant	24.95	
5/8 SLD-440 Combo 440 ½ duck & stubby ant	24.95	
FLX 1/2 WAV-2M ½ wv 2m BNC whip/flex coil	25.95	
RD-2 2m rubber duck antenna	14.95	
RD-220 220 rubber duck antenna	14.95	
RDMD-2 2m mini rubber duck antenna	14.95	
RDMD-220 220 mini rubber duck antenna	14.95	
RDMD-440 440 mini rubber duck antenna	14.95	
RDS-2 2m stubby rubber duck antenna	14.95	
RDS-220 220 stubby rubber duck antenna	14.95	
RDS-440 440 stubby rubber duck antenna	14.95	
SD-2 2m Slim Duck thin rubber antenna	14.95	
SD-220 220 Slim Duck thin rubber antenna	14.95	
SL-440 440 slimline type duck	12.95	
SS-II Super Stick 2m ¾ wv telescopic ant	19.95	
SS-III Super Stick 220 ¾ wv telescopic ant	19.95	
SS-IV Super Stick 440 ¾ wv telescopic ant	19.95	
SS-II/Combo 2m ¾ wv telescopic & stubby ant	26.95	
SS-III/Combo 220 ¾ wv telescopic & stubby ant	26.95	
SS-IV/Combo 440 ¾ wv telescopic & stubby ant	26.95	
TAQ-2 2m ¾ wave stainless whip	10.95	
TAQ-220 220 ¾ wave stainless whip	10.95	
TAQ-440 440 ¾ wave stainless whip	10.95	
TS Thin Stick 2m/220 ¾ wave telescopic whip	16.95	

SOLARCON (SOL)

A-99 10m fiberglass base station antenna	\$ 74.95	64 ⁹⁵
GP-K-1 Ground plane radial kit	39.95	

SOLDER-IT (SLD)

ALP-210 Alum solder paste, 7.1gm ...Δmwfv	\$ 6.00	1 ⁹⁵
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SOLDER-IT - continued

SP-70 Solder paste, 7.1 gm	Δmwfv	6.95	1 ⁹⁵
SONY (SON)			
RM-KW100 Wireless infrared keyboard	Δm	\$ 99.95	59 ⁹⁵
RFU-W100 RF adaptor	Δmwfv	49.95	14 ⁹⁵
SHORTWAVE			
ICF-2010 AM/FM/SW/LW/air port Rcvr w/ps	Δm	\$449.95	359 ⁹⁵
ICF-SW10 AM/FM/SW compact receiver	Δm	59.95	49 ⁹⁵
ICF-SW12 AM/FM/SW travel Rcvr w/world clock	Δm	129.95	99 ⁹⁵
ICF-SW30 AM/FM/SW portable receiver	Δm	129.95	99 ⁹⁵
ICF-SW40 AM/FM/SW port receiver	Δm	149.95	129 ⁹⁵
ICF-SW55 AM/FM/SW port receiver	Δv	449.95	349 ⁹⁵
ICF-SW77 AM/FM/SW portable receiver	Δm	649.95	469 ⁹⁵
ICF-SW100S AM/FM/SW portable receiver	Δm	479.95	349 ⁹⁵
ICF-SW1000T AM/FM/SW port Rcvr w/cassette	Δm	599.95	499 ⁹⁵
ICF-SW1000TS AM/FM/SW port Rcvr/tape/AN-LP1	Δm	649.95	549 ⁹⁵
ICF-SW7600G AM/FM/SW portable receiver	Δm	199.95	179 ⁹⁵
ICF-SW7600GS AM/FM/SW port Rcvr/AN-LP1	Δm	279.95	249 ⁹⁵
AC-E60HG 6vdc 400ma AC adaptor	Δm	22.99	
AN-1 LW/MW/SW outdoor active rcv ant	Δm	119.95	99 ⁹⁵
AN-3 Aircraft active receive ant	Δmwfv	99.95	39 ⁹⁵
AN-102 LW/MW/SW indoor active rcv ant	Δm	89.95	79 ⁹⁵
AN-LP1 Folding active loop ant w/case	Δm	99.95	89 ⁹⁵
STANDARD (STA)			
CAW-151B 12vdc ps cable; C156A	Δwfv	\$ 18.95	14 ⁹⁵
CAW-152B Cig cord w/filter; C156A	Δwfv	28.95	22 ⁹⁵
CHP-111 Headset mic/PTT switch; 156A	Δwfv	48.95	39 ⁹⁵
CHP-150 Headset mic w/VOX; C156A	Δmwfv	87.95	59 ⁹⁵
CMB-600 Helmet clip; CHP-150; 156A	Δm	14.95	12 ⁹⁵
CLC-157 Soft case; CNB-157; C156A	Δmf	23.95	19 ⁹⁵
CLC-158 Leather case; CNB155/156; 156A	Δmf	24.95	19 ⁹⁵
CMB-112 Mounting bracket; C156A	Δmwfv	27.95	19 ⁹⁵
CMP-115 Mini speaker/mic; C156A	Δmwfv	53.95	39 ⁹⁵
CNB-155 4.8v 600ma 2.5w nicad; 156A	Δmwfv	30.95	19 ⁹⁵
CNB-156 6v 600ma 2.5w nicad; 156A	Δw	33.95	24 ⁹⁵
CNB-157 9.6v 600ma 2.5w nicad; 156A	Δwv	42.95	34 ⁹⁵
CNB-158 6v 1200ma 5w nicad; 156A	Δwfv	44.95	32 ⁹⁵
CWC-156A Cgr; CNB155/156/157/158; 156A	Δm	9.95	8 ⁹⁵
C-558A 2m/440 HT/batt/cgr/TT/ctcss	Δv	665.00	499 ⁹⁵
C-628A 440/1.2 HT/batt/cgr/TT/ctcss	Δv	727.00	599 ⁹⁵
CAX-02 Bottom cover	Δmwfv	12.95	8 ⁹⁵
CAX-03 Bottom cover	Δmw	12.95	9 ⁹⁵
CAW-150 Mobile power supply cable	Δmf	18.95	12 ⁹⁵
CAW-151 12vdc power supply cable	Δmf	14.95	12 ⁹⁵
CAW-152 Cig cord w/filter	Δmf	30.95	24 ⁹⁵
CBT-175 2 cell battery case	Δmwfv	17.00	4 ⁹⁵
CLC-152 Lrg case; C158A/CNB152/153	Δm	26.00	14 ⁹⁵
CLC-171 Soft case for CNB-171	Δmf	30.95	19 ⁹⁵
CLC-172 Soft case for CNB-172/173	Δmf	30.95	19 ⁹⁵
CLC-175 Soft case for CBT-175	Δm	30.95	19 ⁹⁵
CLC-520 Std carry case; 228A/528A	Δf	26.95	19 ⁹⁵
CLC-521 Large carry case; 228A/528A	Δmw	29.95	24 ⁹⁵
CLC-550 Standard carry case; 558A	Δf	29.95	26 ⁹⁵
CLC-552 Leather case; 528A/558A	Δmv	34.95	24 ⁹⁵
CLC-5550R Orange carrying case	Δv	35.95	24 ⁹⁵
CLC-560 Case; CBT171/CN-171; 568A	Δmwfv	27.95	19 ⁹⁵
CLC-562 Leather case; CBT171/CNB171	Δm	52.95	36 ⁹⁵
CMB-111 Mobile bracket	Δfv	22.95	14 ⁹⁵
CMP-123 Ear phone spkr/mic	Δfv	63.95	54 ⁹⁵
CNB-152 12v 600ma nicad battery	Δmw	99.95	84 ⁹⁵
CNB-153 7.2v 1000ma nicad batt	Δwfv	99.95	79 ⁹⁵
CNB-172 12v 600ma nicad battery	Δmw	127.00	89 ⁹⁵
CNB-173 7.2v 1100ma nicad	Δmwfv	99.00	69 ⁹⁵
CWC-151A Charger; 12v batteries	Δmw	28.00	19 ⁹⁵
C-168A Dlx submini 2m 30 HT/batt/cgr/TT/DP	Δm	469.00	279 ⁹⁵
CNB-160 Mini 6v 300ma nicad; 168A	Δwv	72.00	29 ⁹⁵
CNB-161 Mini 7.2v 700ma nicad; 168A	Δwfv	78.95	49 ⁹⁵
CNB-162 Mini 12v 600ma nicad; 168A	Δm	130.00	79 ⁹⁵
C-108A 200mw 2m FM HT	Δmwv	269.00	199 ⁹⁵
C-508A 280mw 2m/440 FM HT	Δmwfv	345.00	259 ⁹⁵
CBH-160 Molded belt clip	Δv	12.95	8 ⁹⁵
CLC-401 Standard soft case; 108A	Δwfv	16.95	12 ⁹⁵
CLC-502 Standard soft case; 508A	Δfv	18.95	16 ⁹⁵
CLC-503 Dlx soft case; 108A/508A	Δmwfv	19.95	12 ⁹⁵

STANDARD - continued

CNB-401 Nicad battery	Δwfv	22.95	14 ⁹⁵
CLC-510 Standard soft case; C-510A	Δv	29.95	19 ⁹⁵
CLC-511 Leather case; C-510A	Δv	29.95	19 ⁹⁵
CMA-510A Mobile adapter; C-510A	Δwfv	99.95	59 ⁹⁵
CMP-127 Microphone for C-510A	Δmwfv	69.95	39 ⁹⁵
CNB-510 3.6v 700ma nicad; C-510A	Δwfv	33.95	24 ⁹⁵
CSA-510A Rapid desk cgr; C-510A	Δwfv	89.95	59 ⁹⁵
C-178A 2m/440 FM mini HT/TT/TP	Δf	459.00	349 ⁹⁵
CAW-561 6.5' mic cable; C1208DA	Δv	36.95	29 ⁹⁵
CAW-562 13' mic cable; C1208DA	Δmwfv	48.95	34 ⁹⁵
CAW-570 Split cable for mic; C5718DA	Δm	63.95	44 ⁹⁵
CAW-574 13' fnt panel extension cbt; 5718DA	Δwv	39.95	29 ⁹⁵
CAW-579 Packet cable; C5718DA	Δmf	32.95	24 ⁹⁵
C-5900DA 45w 6m/50w 2m/35w 440 FM	Δv	1049.00	799 ⁹⁵
CAW-590 Split cable for mic	Δmf	55.95	39 ⁹⁵
CSK-15 External speaker	Δmw	47.95	34 ⁹⁵

STARTEK (STR)

1350 1-1300 MHz frequency counter	Δv	\$139.00	109 ⁹⁵
ATH-15 1-1500MHz bar graph freq counter	Δv	235.00	189 ⁹⁵
ATH-30 1-2800MHz bar graph ctr w/1-shot	Δv	299.00	249 ⁹⁵
ATH-30/HS 2800MHz/1-shot/hi-stability	Δv	424.00	349 ⁹⁵
ATH-50 5Hz-2800MHz bar/auto trig/hi speed	Δv	339.00	299 ⁹⁵
ATH-50/HS 2800MHz/trig/hi spd/hi stability	Δv	464.00	399 ⁹⁵
APA-9/VPA-9 9vdc auto power adaptor	Δv	7.95	
RD-2750 27-50MHz rubber duck antenna	Δv	19.95	
RD-150 150MHz rubber duck ant	Δw	16.95	12 ⁹⁵
RD-450 450MHz rubber duck ant	Δv	16.95	12 ⁹⁵
RD-800 800MHz rubber duck antenna	Δv	16.95	
TA-90 Telescopic antenna	Δv	12.95	
TA-90L Right angle telescopic antenna	Δv	16.95	
DC-5 BNC to clip leads cable	Δmwfv	12.95	9 ⁹⁵
M-207-IC Interface cable	Δmwfv	10.95	8 ⁹⁵
CC-90 Carrying case	Δv	12.95	
BP-150 130 - 500 MHz bandpass filter	Δv	49.95	
HP-400 400 - 1500 MHz bandpass filter	Δv	49.95	
HP-800 800 MHz - 2 GHz bandpass filter	Δv	49.95	
LP-60 DC - 60 MHz bandpass filter	Δv	49.95	
DC-10 Direct probe	Δmf	22.95	19 ⁹⁵
LP-22 Lo-pass probe	Δmf	29.95	19 ⁹⁵
P-60 Probe, 60MHz scope, 200MHz FC	Δmf	29.95	19 ⁹⁵
P-100 Probe, 100MHz scope, 300MHz FC	Δmf	39.95	24 ⁹⁵
P-110 Probe, 200MHz scope, 500 MHz FC	Δv	69.00	49 ⁹⁵
CAM-PHA-AES B&W pinhole TV camera/mic/ps	Δv	136.95	

SVETLANA (SVE)

4CX250B/7203 Tube	special order	\$105.95	
4CX400A Tube	special order	140.95	
4CX800A Tube	special order	190.95	
572B Tube	Δmf	86.95	
811A Tube	Δmf	25.95	
8874/3CX400A7 Tube	special order	335.95	

Other Tubes Available on Special Order

TAB Books (TAB)

447748 Shortwave Q & A book	Δm	\$ 14.95	9 ⁹⁵
641351 SW Radio Listening for Beginners	Δmv	19.95	12 ⁹⁵
643478 Complete SW Listener's HB	Δmf	29.95	19 ⁹⁵
643540 Beginner's HB of Ham Radio	Δv	24.95	19 ⁹⁵
765340 Build Your Own SW Antennas	Δmw	16.95	9 ⁹⁵

TIMEWAVE/AEA

TIMEWAVE (TIM)			
DSP-9 PLUS Advanced dig sig proc unit	Δmf	\$209.95	
DSP-59 PLUS Dlx dig signal proc unit	Δmf	269.95	
DSP-599zx All-mode DSP noise filter	Δmwfv	399.95	
DSP-59Y DSP filter module; Yae SP-5/6	Δmw	389.95	
(AEA) AC-4 12vdc 1.5A ps	Δmf	19.95	
DSP-RTTY RTTY proc; 599zx/59Y	Δmwv	69.95	
TIMEWAVE/AEA DATA/SOFTWARE (AEA)			
DC-1 Cigarette lighter cord	Δmf	\$ 7.95	4 ⁹⁵
KK-1 Keyboard keyer for IBM PC	Δwfv	199.95	169 ⁹⁵
PK-12 1200 bps VHF/UHF pkt controller	Δm	99.95	
100K/PK-12 100K mail upgrade; PK12	Δmwfv	39.95	29 ⁹⁵
AC-1 12vdc 600 ma adaptor	Δmwfv	15.95	

TIMEWAVE/AEA - continued

	Reg Sale
PK-96/18K 9600 baud packet/32K RAM ..Δm	169.95
100K 100K mem upgrade; PK-96 ..Δmwf	39.95
PK-96/100K 9600 baud control/128K RAM ..Δmv	199.95
AC-1 12vdc 600 ma adaptor ..Δmwf	15.95
PK Pakratt Lite Packet only term prog Δmwf	49.95
DSP-2232zx Multimode dual port control/soft Δm	599.95
9600 bps modem card option; PK-900 Dmf	75.95
AC-4 12vdc 1.5A power supply ..Δmwf	19.95
ACARS Aircraft data reception soft ..Δmwf	90.95
ACARS/900 Air data rec soft; PK900 ..Δmwf	50.95
AEA-FAX III-900 PK900/IBM FAX soft Δmwf	129.95
PC-Pakratt II w/FAX Prog; 12/88/232 Δmwf	69.95
PC-Pakratt for Win 2.0 IBM; 12/88/232 ..Δm	79.95
PC-Pakratt-88 Software; PK-12/88/96 Dm	49.00
Log Windows 3.0 Program for IBM ..Δmwf	49.95
IH CABLE PK-232 - lco/Yae/Alti HT ..Δmwf	25.95
IM CABLE PK232 - lco 8pin mic cbl Δmwf	25.95
IW CABLE PK232 - lcom W2A cable ..Δmwf	25.00
KH CABLE PK-232 - Ken HT cable ..Δmwf	25.95
YM CABLE PK-232 - Yae 8pin mic cbl Δmf	25.95
WeFax-256 WX FAX prog; 1232/2232 Δmwf	129.95
AA.COM SWR curve IBM soft; 121 & V/U Dmf	75.00
AEA-FAX III FAX & wire photo program ..Δm	149.95
DM-1 2m/220/440 FM deviation meter ..Δm	169.95
IDR-96 5w 441.05MHz data Xcv/9600 Δmwf	499.95
Morse University II Morse code Windows soft Δm	39.95
PCB-88 IBM plug-in packet adapter ..Δmwf	179.00

TRIPP LITE (TRI)

PR-7 5A power supply, 7A surge	\$ 55.00	49 ⁹⁵
PR-10 7.5A power supply, 10A surge	79.00	69 ⁹⁵
PR-12 9A power supply, 12A surge	85.00	74 ⁹⁵
PR-20 16A power supply, 20A surge	125.00	99 ⁹⁵
PR-30 24A power supply, 30A surge	172.00	129 ⁹⁵
PR-40 32A power supply, 40A surge	211.00	169 ⁹⁵
PR-50 37A power supply, 50A surge	262.00	199 ⁹⁵
PR-60 48A power supply, 60A surge	309.00	239 ⁹⁵
TL-11 Trim Line small low prof 8A ps Δmwf	85.00	44 ⁹⁵
TL-11 Trim Line large low prof 8A ps Δmwf	97.00	49 ⁹⁵
BC PERS-280 Standby UPS 280VA ..Δmf	119.00	69 ⁹⁵
BC PERS-420 Standby UPS 420VA ..Δv	156.00	109 ⁹⁵
IBAR-12 Rack mt 12-out surge suppress ..Δmv	169.00	69 ⁹⁵
ISOBAR-4 4 outlet premium surge suppressor	79.95	49 ⁹⁵
ISOBAR-6 6 outlet premium surge suppressor	99.95	59 ⁹⁵
ISOBAR-8 ULTRA 8 outlet surge suppressor/LEDs	116.95	79 ⁹⁵
MD-6+ 6 outlet console surge suppressor ..	149.95	99 ⁹⁵
SUPER-7 7 outlet surge suppressor	27.95	19 ⁹⁵
SUPER-7+TEL 7 outlet/fax modem surge	38.95	29 ⁹⁵
TR-6 Surge Alert 6 out surge suppressor Δmwf	59.95	24 ⁹⁵
TR-6FM Surge Alert+Tel 6 out surge suppressor	69.95	49 ⁹⁵
PV-140 140w solid state 12vdc-115vac inverter	61.25	49 ⁹⁵
PV-300 300w solid state 12vdc-115vac inverter	89.95	74 ⁹⁵

TUBES (TUB)

6146W Tube	\$ 26.95
12BY7A Tube	12.95
3-500G High dissipation tube (3-500Z)	119.95
3-500Z	229.95
572B Tube	49.95
811A Tube	19.95

Also see SVETLANA

TUNE BELT (TUN)

HH-1PS Up to 5" HT radio belt	\$ 19.95	9 ⁹⁵
HH-1PM Up to 6" HT radio belt	19.95	9 ⁹⁵
HH-1PL Up to 7" HT radio belt	19.95	9 ⁹⁵
HH-2PM To 6" HT radio belt/batt pocket Δmwf	21.95	9 ⁹⁵
HH-2PL To 8" HT radio belt/batt pocket Δmwf	21.95	9 ⁹⁵

US TOWER (UST)

FREE STANDING CRANK-UPS (TX not recommended)

TX-438 38' crank-up tower	T 1269.00	1142 ⁹⁵
TX-455 55' crank-up tower	T 1915.00	1399 ⁹⁵
TX-472 72' crank-up tower	T 3147.00	2832 ⁹⁵

US TOWER - continued

	Reg Sale
TX-472MDP 72' crank-up w/motor drive ..T	5064.00 3899 ⁹⁵
TX-489 89' crank-up tower	T 5475.00 4927 ⁹⁵
TX-489MDPL 89' crank-up w/motor drive ..T	8212.00 7390 ⁹⁵
TX-3106MDPLSP 106' crank-up/mot drive ..T	12999.00 11699 ⁹⁵
FREE STANDING HEAVY DUTY CRANK-UP TOWERS	
HDX-538 38' crank-up tower	T 1642.00 1477 ⁹⁵
HDX-555 55' crank-up tower	T 2874.00 2099 ⁹⁵
HDX-572 72' crank-up tower	T 4927.00 4434 ⁹⁵
HDX-572MDPL 72' crank-up w/motor drive ..T	7528.00 6775 ⁹⁵
HDX-589MDPL 89' crank-up w/motor drive ..T	9855.00 8869 ⁹⁵
HDX-689MDPL 89' HD crank-up w/motor ..T	19039.00 17135 ⁹⁵
HDX-5106MDPL 106' HD crank-up w/motor T	20719.00 18647 ⁹⁵
COMPACT TMM (Top mount rotor for full retraction)	
TMM-433SS 33' crank-up tower	T 1355.00 1219 ⁹⁵
TMM-433HD 33' HD crank-up tower	T 1642.00 1477 ⁹⁵
TMM-541SS 41' crank-up tower	T 1779.00 1599 ⁹⁵

ACCESSORIES FOR CRANK-UP TOWERS

CX-2 Coax arms (2) for 2-section tower	\$ 55.95
CX-3 Coax arms (3) for 3-section tower	77.95
CX-4 Coax arms (4) for 4-section tower	122.95
CX-5 Coax arms (5) for 5-section tower	167.00
CX-6 Coax arms (6) for 6-section tower	212.00
HDP Service platform	T 904.00 813 ⁹⁵
STS-4 Rotor accessory for TX/TMM towers ..T	235.00 211 ⁹⁵
IV-16 Inverted vee arm for MA's	41.95
M-5 2" OD 5' mast extension for MA's	40.95
M-10 2" OD 10' mast	77.95
M-15 2" OD 15' mast	115.95
M-20 2" OD 20' mast	152.00
M-15R 2" OD 15' reinforced mast	174.00
M-20R 2" OD 20' reinforced mast	230.00
MD-75 Heavy duty 1 HP motor drive	T 1108.00 997 ⁹⁵
MDP-750* Pull-down drive; TX-472/HDX-555 T	1724.00 1551 ⁹⁵
MDPL-1000* Pull-down drive; HDX-572	T 2340.00 2106 ⁹⁵
*Requires MCL-100 or RMC-1000 also	
MRF Mast raising fixture	298.00 268 ⁹⁵
MCL-100 Limit switch package	517.00 465 ⁹⁵
RMC-1000 Remote control w/limit switch	1108.00 997 ⁹⁵
RP-3 Rotor plate for 10" section	39.95
RP-4 Rotor plate for 12 1/2" section	47.95
RP-5 Rotor plate for 15" section	52.95
TRX-80 Raising fixture; TX-438/455; HDX-538/555 T	483.00 434 ⁹⁵
TRX-80HD Raising fixture; TX-472/489; HDX-572/589 T	635.00 571 ⁹⁵
TRX-100HD Raising fixture; HDX-689/516 T	895.00 805 ⁹⁵
TB-2US Thrust bearing; 2" mast w/2 flange holes	110.95

MA-SERIES TUBULAR TOWERS

MA-40 40' crank-up mast	T 1007.00 679 ⁹⁵
MA-550 55' crank-up mast	T 1704.00 1069 ⁹⁵
MA-550MDP 55' crank-up mast w/motor ..T	3258.00 2932 ⁹⁵
MA-770 70' crank-up mast	T 2810.00 2529 ⁹⁵
MA-770MDP 70' crank-up mast w/motor	T 4445.00 3999 ⁹⁵
MA-850 85' crank-up mast	T 4344.00 3909 ⁹⁵
MA-850MDP 85' crank-up mast w/motor ..T	5991.00 5391 ⁹⁵

MA-SERIES ACCESSORIES

CX-2M Coax arms (2) for MA-40	\$ 59.95
CX-3M Coax arms (3) for MA-550	88.95
CX-4M Coax arms (4) for MA-770	148.00
CX-5M Coax arms (5) for MA-850	178.00
MAB-40 Hinged base for MA-40	T 402.00 361 ⁹⁵
MAB-550 Hinged base for MA-550	T 480.00 432 ⁹⁵
MAB-770 Hinged base for MA-770	T 581.00 522 ⁹⁵
MAB-850 Hinged base for MA-850	T 704.00 633 ⁹⁵
MAF-40 Raising fixture for MA-40	246.00
MAF-550 Raising fixture for MA-550	T 340.00
MAF-770 Raising fixture for MA-770	T 346.00
MAF-850 Raising fixture for MA-850	T 458.00
MARB-40 Rotor base accessory for MA-40	T 615.00
MARB-550 Rotor base accessory for MA-550 T	727.00
MARB-770 Rotor base accessory for MA-770 T	861.00
MARB-850 Rotor base accessory for MA-850 T	1018.00

US TOWER - continued

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UNADILLA (See W2AU)

Unified Microsystems (UNM)

W9XT Contest card for IBM PC & compatible	\$149.95
CCC-4 4pin mic contest card cable semi-kit	44.95
CCC-8 8pin mic contest card cable semi-kit	44.95

Universal Towers (UNT)

4-30	4 sq ft wind load 30' alum tower	.....T	\$348.00	313 ⁹⁵
9-30	9 sq ft wind load 30' alum tower	.....T	469.00	422 ⁹⁵
12-30	12 sq ft wind load 30' alum tower	.....T	616.00	554 ⁹⁵
21-30	21 sq ft wind load 30' alum tower	.....T	732.00	658 ⁹⁵
23-30	23 sq ft wind load 30' alum tower	.....T	969.00	872 ⁹⁵
35-30	35 sq ft wind load 30' alum tower	.....T	1092.00	982 ⁹⁵
4-40	4 sq ft wind load 40' alum tower	.....T	584.00	525 ⁹⁵
7-40	7 sq ft wind load 40' alum tower	.....T	734.00	660 ⁹⁵
9-40	9 sq ft wind load 40' alum tower	.....T	818.00	736 ⁹⁵
12-40	12 sq ft wind load 40' alum tower	.....T	969.00	872 ⁹⁵
15-40	15 sq ft wind load 40' alum tower	.....T	1083.00	974 ⁹⁵
21-40	21 sq ft wind load 40' alum tower	.....T	1203.00	1082 ⁹⁵
23-40	23 sq ft wind load 40' alum tower	.....T	1440.00	1296 ⁹⁵
4-50	4 sq ft wind load 50' alum tower	.....T	823.00	740 ⁹⁵
5-50	5 sq ft wind load 50' alum tower	.....T	936.00	842 ⁹⁵
7-50	7 sq ft wind load 50' alum tower	.....T	1053.00	947 ⁹⁵
9-50	9 sq ft wind load 50' alum tower	.....T	1171.00	1053 ⁹⁵
15-50	15 sq ft wind load 50' alum tower	.....T	1555.00	1399 ⁹⁵
16-50	16 sq ft wind load 50' alum tower	.....T	1678.00	1510 ⁹⁵
4-60	4 sq ft wind load 60' alum tower	.....T	1172.00	1054 ⁹⁵
6-60	6 sq ft wind load 60' alum tower	.....T	1437.00	1293 ⁹⁵
7-60	7 sq ft wind load 60' alum tower	.....T	1529.00	1376 ⁹⁵
9-60	9 sq ft wind load 60' alum tower	.....T	1640.00	1476 ⁹⁵
3-70	3 sq ft wind load 70' alum tower	.....T	1527.00	1374 ⁹⁵
4-70	4 sq ft wind load 70' alum tower	.....T	1877.00	1689 ⁹⁵
6-70	6 sq ft wind load 70' alum tower	.....T	1911.00	1719 ⁹⁵
7-70	7 sq ft wind load 70' alum tower	.....T	1996.00	1796 ⁹⁵
3-80	3 sq ft wind load 80' alum tower	.....T	2059.00	1853 ⁹⁵
4-80	4 sq ft wind load 80' alum tower	.....T	2384.00	2145 ⁹⁵
2-90	2 sq ft wind load 90' alum tower	.....T	2470.00	2223 ⁹⁵
B-14	Base for tower	.....	65.95	
B-18	Base for tower	.....	65.95	
B-22	Base for tower	.....	110.28	99 ⁹⁵
B-26	Base for tower	.....	141.78	127 ⁹⁵
Extra 14"	stubs (between base & tower)	.set	12.95	
Extra 18"	stubs (between base & tower)	.set	24.95	
Extra 22"	stubs (between base & tower)	.set	40.95	
Extra 26"	stubs (between base & tower)	.set	40.95	
Extra 30"	stubs (between base & tower)	.set	60.95	
RFM-11	Flat roof mt for guyed tower	.....	44.95	
RFM-14	Flat roof mt for guyed tower	.....	44.95	
RFM-18	Flat roof mt for guyed tower	.....	69.95	
RFM-22	Flat roof mt for guyed tower	.....	103.95	93 ⁹⁵
RFM-26	Flat roof mt for guyed tower	.....	138.66	124 ⁹⁵
R-11	Rotor mount	.....	31.95	
R-14	Rotor mount	.....	47.95	
R-18	Rotor mount	.....	63.95	
SEE LITERATURE FOR CONFIGURATION OF TOWERS				
11 Top	11" top tower section	.....T	118.20	106 ⁹⁵
14 Top	14" top tower section	.....T	148.94	134 ⁹⁵
18 Top	18" top tower section	.....T	270.10	243 ⁹⁵
14 Taper	14" taper tower section	.....T	131.04	117 ⁹⁵
18 Taper	18" taper tower section	.....T	235.04	211 ⁹⁵

PRICE LIST

UNIVERSAL - continued

22 Taper 22" taper tower section	T	350.48	315 ⁹⁵
26 Taper 26" taper tower section	T	471.12	424 ⁹⁵
11 Straight 11" straight tower section	T	116.48	104 ⁹⁵
14 Straight 14" straight tower section	T	131.04	117 ⁹⁵
18 Straight 18" straight tower section	T	235.04	211 ⁹⁵
22 Straight 22" straight tower section	T	350.48	315 ⁹⁵
26 Straight 26" straight tower section	T	471.12	424 ⁹⁵

HD35-40 35 sq ft wind load 40' alum tower	T	1681.00	1512 ⁹⁵
HD21-50 21 sq ft wind load 50' alum tower	T	1793.00	1613 ⁹⁵
HD9-60 9 sq ft wind load 60' alum tower	T	1880.00	1692 ⁹⁵
HD16-60 16 sq ft wind load 60' alum tower	T	2265.00	2038 ⁹⁵
HD21-60 21 sq ft wind load 60' alum tower	T	2386.00	2147 ⁹⁵

HD8-70 8 sq ft wind load 70' alum tower	T	2115.00	1903 ⁹⁵
HD12-70 12 sq ft wind load 70' alum tower	T	2620.00	2358 ⁹⁵
HD17-70 17 sq ft wind load 70' alum tower	T	2858.00	2572 ⁹⁵
HD21-70 21 sq ft wind load 70' alum tower	T	2978.00	2680 ⁹⁵

HD8-80 8 sq ft wind load 80' alum tower	T	2707.00	2436 ⁹⁵
HD9-80 9 sq ft wind load 80' alum tower	T	2824.00	2541 ⁹⁵
HD11-80 11 sq ft wind load 80' alum tower	T	3208.00	2887 ⁹⁵
HD12-80 12 sq ft wind load 80' alum tower	T	3213.00	2891 ⁹⁵
HD16-80 16 sq ft wind load 80' alum tower	T	3449.00	3104 ⁹⁵

HD4-90 4 sq ft wind load 90' alum tower	T	2818.00	2536 ⁹⁵
HD8-90 8 sq ft wind load 90' alum tower	T	3325.00	2992 ⁹⁵
HD11-90 11 sq ft wind load 90' alum tower	T	3802.00	3421 ⁹⁵
HD4-100 4 sq ft wind load 100' alum tower	T	3775.00	3397 ⁹⁵
HD8-100 8 sq ft wind load 100' alum tower	T	4039.00	3635 ⁹⁵

B-30 Base for HD tower		221.50	199 ⁹⁵
RFM-30 Flat roof mt for guyed tower		193.98	174 ⁹⁵
1-5/8SC Flange bearing		94.95	
2-3/16SC Flange bearing		120.64	108 ⁹⁵
Top Plate Flange plate welded to top section		23.95	

30 Taper 30" taper tower section	T	592.80	533 ⁹⁵
30 Straight 30" straight tower section	T	592.80	533 ⁹⁵
1-1/4" OD x 5 ft aluminum mast	T	22.95	
1-1/4" OD x 10 ft aluminum mast	T	31.95	
1-1/2" OD x 10 ft aluminum mast	T	39.95	
2" OD x 8 ft aluminum mast	T	47.95	
2" OD x 16 ft aluminum mast	T	94.95	

SEE LITERATURE FOR CONFIGURATION OF TOWERS

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VALOR (See PRO AM)

SWR-1 SWR/field strength meter		\$36.14	19 ⁹⁵
SWR-3 Mini SWR meter		21.68	14 ⁹⁵

VANCO (VCO)

SWR-1 SWR/field strength meter		\$36.14	19 ⁹⁵
SWR-3 Mini SWR meter		21.68	14 ⁹⁵

VAN GORDEN (VAN)

Hi-Q 1:1 balun		\$14.95	
Hi-Q 4:1 balun		14.95	
Antenna center insulator		6.95	
Antenna end insulator	pair	4.95	
Dog bone type antenna insulator	each	.95	
NR-100 Nylon antenna guy rope	100 ft.	4.95	
NR-1,000 Nylon ant guy rope	1,000 ft.	44.95	
D-80 80m wire dipole antenna		32.95	
SD-80 Short 80m dipole		36.95	
D-40 40m wire dipole antenna		29.95	
SD-40 Short 40m dipole		34.95	
D-20 20m wire dipole antenna		28.95	
D-15 15m wire dipole antenna		27.95	
D-10 10m wire dipole antenna		26.95	

VAN GORDEN - continued

All Bander Dipole 160-10m (w/tuner) 135' ant		29.95	
Shorty All Bander 160-10m (w/tuner) 70' ant		44.95	
65RV Flat-top 5-band 102' ant/mfr/100' cable		50.95	
65RV-E Flat-top 5-band 102' ant/31' cable		28.95	
65RV JR Flat-top 4-band 52' ant/17' cable		24.95	
65RV M Flat-top 5-band 204' ant/65' cable		50.95	
N connector Type N connector for 9913		4.95	

450 ohm 18ga solid ladderline	100 ft.	12.95	
450 ohm 18ga solid ladderline	1,000 ft.	110.00	99 ⁹⁵
450 ohm 14ga stranded ladderline	100 ft.	24.95	
450 ohm 14ga stranded ladderline	1,000 ft.	220.00	199 ⁹⁵

(WA1) WA1FLL Ladder-Loc 450 ohm ctr ins		12.95	
RG-213 Non-contaminating	per ft.	199.95	
RG-213/500 Non-contaminating	.500 ft. roll	179 ⁹⁵	

8X-3ST 3' RG-8X coax/silver teflon PL259s		8.95	
8X-6ST 6' RG-8X coax/silver teflon PL259s		10.95	
8X-12ST 12' RG-8X coax/silver teflon PL259s		11.95	
8X-25ST 25' RG-8X coax/silver teflon PL259s		15.95	
8X-50ST 50' RG-8X coax/silver teflon PL259s		24.95	
8X-75ST 75' RG-8X coax/silver teflon PL259s		31.95	
8X-100ST 100' RG-8X coax/silver teflon PL259s		37.95	

213-3ST 3' RG-213 coax/silver teflon PL259s		11.95	
213-6ST 6' RG-213 coax/silver teflon PL259s		14.95	
213-12ST 12' RG-213 coax/silver teflon PL259s		18.95	
213-25ST 25' RG-213 coax/silver teflon PL259s		25.95	
213-50ST 50' RG-213 coax/silver teflon PL259s		38.95	
213-75ST 75' RG-213 coax/silver teflon PL259s		54.95	
213-100ST 100' RG-213 coax/silver teflon PL259s		72.95	

VECTRONICS (VEC)

VC-300M 300w mobile antenna tuner		\$109.95	99 ⁹⁵
VC-300DLP 300w digital antenna tuner		159.95	149 ⁹⁵
VC-300D 300w digital antenna tuner		199.95	179 ⁹⁵
HFT-1500 1.5kw antenna tuner		459.95	399 ⁹⁵

AT-100 .3-30 MHz active antenna/tuner	m	79.95	
HF-600QSK 1kw HF amplifier w/QSK	Δm	1595.00	1249 ⁹⁵
HPF-1 High pass filter, 75 or 300 ohms		19.95	
HPF-2 Deluxe high pass filter, 75 or 300 ohms		24.95	
LP-30 1.5kw low pass filter		49.95	
LP-2500 2.5kw low pass filter		79.95	

CK-200 Deluxe keyer	m	79.95	
DL-300M 300w dummy load		34.95	
DL-650M 1.5kw dummy load		64.95	
DL-2500 2.5kw dummy load		199.95	179 ⁹⁵

PM-30HF 300/3kw HF wattmeter		79.95	
PM-30UV 300/300w VHF/UHF wattmeter		89.95	
AC-12 12vdc 300ma adapter		12.95	
PS-30F 25A power supply, 30A surge		129.95	
PS-50F 35A power supply, 50A surge		199.95	

VIBROPLEX (VIB)

090 Original Gold Bug		\$329.95	299 ⁹⁵
100 Original Presentation Super deluxe bug		289.95	269 ⁹⁵
105 Original Deluxe Bug		199.95	
110 Original Standard Bug		159.95	
113 VibroKeyer Gold Paddle		299.95	269 ⁹⁵
115 VibroKeyer Deluxe Paddle		179.95	
120 VibroKeyer Standard Paddle		139.95	
123 Iambic Gold Paddle		299.95	269 ⁹⁵
125 Iambic Presentation Paddle		259.95	239 ⁹⁵
130 Iambic Deluxe Paddle		179.95	
135 Iambic Standard Paddle		139.95	
145 Triangular Brass Racer Iambic paddle		99.95	
150 Square Brass Racer Iambic paddle		139.95	
153 Gold straight key		299.95	269 ⁹⁵
155 Standard straight key		139.95	
160 Deluxe straight key		179.95	
162 Gold Hand key/Iambic Paddle double		399.95	359 ⁹⁵
163 Gold Hand key/VibroKeyer Paddle double		399.95	359 ⁹⁵
165 Deluxe Hand key/Iambic Paddle double		349.90	319 ⁹⁵
170 Dlx Hand key/VibroKeyer Paddle double		349.90	319 ⁹⁵
175 Standard Hand key/Iambic Paddle double		299.95	269 ⁹⁵
180 Std Hand key/VibroKeyer Paddle double		299.95	269 ⁹⁵

WA1FFL (WA1)

Ladder-Loc 450 ohm ladderline center attach		\$12.95	
W2AU (Unadilla) (W2A)			
W2AU 1:1 160-10m balun, lightning arrestor		\$24.95	
W2AU Beam Balun, 1:1		24.95	
W2AU 4:1 160-10m balun, lightning arrestor		24.95	

W2DU-HF 1:1 1.8-30 MHz choke balun		26.95	
W2DU Beam Balun 40-10m 1:1 choke balun		26.95	
W2DU-VHF 1:1 30-250 MHz choke balun		26.95	

HA AN-sulator center insulator		9.95	
HE END-sulator end insulators	pair	4.95	
KW-80CW Reyco 80m CW ant traps	pair	48.95	
KW-80F Reyco 75m phone ant traps	pair	48.95	
KW-40 Reyco 40m antenna traps	pair	42.95	
KW-30 Reyco 30m antenna traps	pair	42.95	
KW-20 Reyco 20m antenna traps	pair	41.95	
KW-17 Reyco 17m antenna traps	pair	41.95	
KW-15 Reyco 15m antenna traps	pair	41.95	
KW-12 Reyco 12m antenna traps	pair	41.95	
KW-10 Reyco 10m antenna traps	pair	41.95	

W2AU/W2VS 5-band ant kit (see tuner)		85.95	
W5YI (W5Y)			
GCSF Gordon West General code tapes/manual		\$19.90	
GTSP Gordon West General theory tapes/manual		19.90	
GUS General Upgrade Software		34.95	
GWAM Gordon West Advanced study manual		11.95	
GWAW Gordon West Adv written theory tapes		19.95	
GW6E Gordon West 6 ea 10-28 wpm code tapes		29.95	
GW6M Gordon West Extra study manual		11.95	
GWET Gordon West Extra code tapes		9.95	
GWFW Gordon West Extra written theory tapes		19.95	
GW6G Gordon West 6 ea 5-16 wpm code tapes		29.95	
GW6H Gordon West General study manual		11.95	
GW6I Gordon West General code tapes		9.95	
GW6J Gordon West General theory tapes		9.95	
GW6K Gordon West 6 ea 0-7 wpm code tapes		29.95	
GWNT Gordon West Novice Code Teacher		9.95	
GWNV Gordon West Novice theory tapes		9.95	
GWTF Gordon West No-Code Tech theory tapes		29.95	
GWTM Gordon West No-Code Tech manual		12.95	
GWTV Gordon West Tech theory tapes		9.95	
HOS Ham operator software package		39.95	
NCS No-code ham radio soft package	Δdv	34.95	29 ⁹⁵
NCSW No-code ham radio WIN soft package		34.95	
NCPV Ham No-Code video seminar w/manual		31.95	
TPG Tech/Plus/General manuals/soft/code		49.95	

W5YI (W5Y)

GCSF Gordon West General code tapes/manual		\$19.90	
GTSP Gordon West General theory tapes/manual		19.90	
GUS General Upgrade Software		34.95	
GWAM Gordon West Advanced study manual		11.95	
GWAW Gordon West Adv written theory tapes		19.95	
GW6E Gordon West 6 ea 10-28 wpm code tapes		29.95	
GW6M Gordon West Extra study manual		11.95	
GWET Gordon West Extra code tapes		9.95	
GWFW Gordon West Extra written theory tapes		19.95	
GW6G Gordon West 6 ea 5-16 wpm code tapes		29.95	
GW6H Gordon West General study manual		11.95	
GW6I Gordon West General code tapes		9.95	
GW6J Gordon West General theory tapes		9.95	
GW6K Gordon West 6 ea 0-7 wpm code tapes		29.95	
GWNT Gordon West Novice Code Teacher		9.95	
GWNV Gordon West Novice theory tapes		9.95	
GWTF Gordon West No-Code Tech theory tapes		29.95	
GWTM Gordon West No-Code Tech manual		12.95	
GWTV Gordon West Tech theory tapes		9.95	
HOS Ham operator software package		39.95	
NCS No-code ham radio soft package	Δdv	34.95	29 ⁹⁵
NCSW No-code ham radio WIN soft package		34.95	
NCPV Ham No-Code video seminar w/manual		31.95	
TPG Tech/Plus/General manuals/soft/code		49.95	

W5YI (W5Y)

GCSF Gordon West General code tapes/manual		\$19.90	
GTSP Gordon West General theory tapes/manual		19.90	
GUS General Upgrade Software		34.95	
GWAM Gordon West Advanced study manual		11.95	
GWAW Gordon West Adv written theory tapes		19.95	
GW6E Gordon West 6 ea 10-28 wpm code tapes		29.95	
GW6M Gordon West Extra study manual		11.95	
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GW6I Gordon West General code tapes		9.95	
GW6J Gordon West General theory tapes		9.95	
GW6K Gordon West 6 ea 0-7 wpm code tapes		29.95	
GWNT Gordon West Novice Code Teacher		9.95	
GWNV Gordon West Novice theory tapes		9.95	
GWTF Gordon West No-Code Tech theory tapes		29.95	
GWTM Gordon West No-Code Tech manual		12.95	
GWTV Gordon West Tech theory tapes		9.95	
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NCSW No-code ham radio WIN soft package		34.95	
NCPV Ham No-Code video seminar w/manual		31.95	
TPG Tech/Plus/General manuals/soft/code		49.95	

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GWET Gordon West Extra code tapes		9.95	
GWFW Gordon West Extra written theory tapes		19.95	
GW6G Gordon West 6 ea 5-16 wpm code tapes		29.95	
GW6H Gordon West General study manual		11.95	
GW6I Gordon West General code tapes		9.95	
GW6J Gordon West General theory tapes		9.95	
GW6K Gordon West 6 ea 0-7 wpm code tapes		29.95	
GWNT Gordon West Novice Code Teacher		9.95	
GWNV Gordon West Novice theory tapes		9.95	
GWTF Gordon West No-Code Tech theory tapes		29.95	
GWTM Gordon West No-Code Tech manual		12.95	
GWTV Gordon West Tech theory tapes		9.95	</

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FP-1030A 25A ps, 30A surge w/meters	269.00	249 ⁹⁵
FT-1000MP 9-band Xcvt/EDSP/tuner/ps	3699.00	2699 ⁹⁵
*Sale price with \$100 instant coupon thru 11/30/98		
DVS-2 Digital voice recording module	238.00	219 ⁹⁵
FH-1 Remote control keypad	88.95	
MD-100A8X Desk mic w/tone control	138.00	129 ⁹⁵
MH-3188 Extra hand microphone	39.95	
SP-8 External speaker w/filters	173.00	159 ⁹⁵
LL-7 Phone patch unit for SP-8	153.00	139 ⁹⁵
TCXO-4 TCXO unit	99.95	
TCXO-6 Deluxe TCXO unit, 0.5 ppm	190.00	174 ⁹⁵
YF-110CN 250 Hz 3rd IF main Rcvr CW fil	157.00	144 ⁹⁵
YF-110SN 2 KHz 3rd IF main Rcvr SSB fil	157.00	144 ⁹⁵
YF-114CN 250 Hz 2nd IF main Rcvr CW fil	157.00	144 ⁹⁵
YF-114SN 2 KHz 2nd IF main Rcvr SSB fil	157.00	144 ⁹⁵
YF-115C 500 Hz CW Collins mech filter	173.00	159 ⁹⁵
YH-77ST Open-air type stereo headphones	51.95	
FT-1000 Xcvt/ps/tuner/kyr/mic/XF-AB	4399.00	3399 ⁹⁵
BPF-1 Dual bandpass filter; crossband rcv	196.00	179 ⁹⁵
TCXO-1 Temp compensated xtal osc	190.00	174 ⁹⁵
XF-C 2.4KHz SSB xtal fil (455KHz)	157.00	144 ⁹⁵
YF-110SN/XF-D 2 KHz SSB xtal fil (455 KHz)	157.00	144 ⁹⁵
YF-115C 500 Hz CW Collins mech filter	173.00	159 ⁹⁵
FT-1000D Dlx Xcvt w/BPF/TCXO/XF-ABCD	5459.00	4399 ⁹⁵
DVS-2 Digital voice recording module	238.00	219 ⁹⁵
FIF-232C Interface for RS-232	95.95	
MD-100A8X* Desk mic w/tone control	138.00	129 ⁹⁵
*Cable needed for FT-1000D contact service for info		
SP-5 External spkr w/audio filter	157.00	144 ⁹⁵
LL-5 Phone patch unit for SP-5	143.00	129 ⁹⁵
XF-455MC 600Hz CW filter (455KHz); subrcvr	157.00	144 ⁹⁵
YF-110CN/XF-F 250 Hz CW xtal fil (455 KHz)	157.00	144 ⁹⁵
YH-77ST Open-air type stereo headphones	51.95	
FT-920 9-band Xcvt/AF-DSP/tuner/6m/kyrr	2299.00	1499 ⁹⁵
FM-1 FM unit FREE with FT-920! Limited Time!		
FP-1023 23A switching ps w/fan, 25A surge	169.00	159 ⁹⁵
FP-1025A 20A switching ps, 25A surge Dmwf	199.00	149 ⁹⁵
FP-1030A 25A ps, 30A surge w/meters	269.00	249 ⁹⁵
FM-1 FM unit	62.95	
MD-100A8X Desk mic w/tone control	138.00	129 ⁹⁵
SP-8 External speaker w/filters	173.00	159 ⁹⁵
LL-7 Phone patch unit for SP-8	153.00	139 ⁹⁵
TCXO-7 TCXO unit	99.95	
YF-116A 6 KHz AM filter	127.00	119 ⁹⁵
YF-116C 500 Hz CW filter	127.00	119 ⁹⁵
YH-77ST Open-air type stereo headphones	51.95	
ATU-2 Internal auto ant tuner; FT-900	301.00	249 ⁹⁵
SP-767P Speaker/patch for FT-767GX Dmwf	143.00	99 ⁹⁵
TCXO-2 Temp comp xtal osc; FT990	157.00	69 ⁹⁵
XF-10.9M-202-01 2KHz SSB fil; FT990	127.00	119 ⁹⁵
XF-1155-01/YF115501 2.75 Collins filter .Dm	189.00	99 ⁹⁵
FT-847 HF/6m/2m/430 Earth Station Xcvt/mic	2399.00	1799 ⁹⁵
FP-1023 23A switching ps w/fan, 25A surge	169.00	159 ⁹⁵
FP-1025A 20A switching ps, 25A surge Dmwf	199.00	149 ⁹⁵
FP-1030A 25A ps, 30A surge w/meters	269.00	249 ⁹⁵
ATAS-100 HF/6/2/430 motorized mob ant	349.00	319 ⁹⁵
CT-61 Interface cable; FT-847 to amplifier	15.95	
FC-20 Automatic antenna tuner	299.00	269 ⁹⁵
FVS-1A Voice synthesizer	43.95	
MD-100A8X Desk mic w/tone control	138.00	129 ⁹⁵
MH-365D DTMF mobile microphone	60.95	
MMB-66 Mobile mounting bracket	39.95	
SP-8 External speaker w/filters	173.00	159 ⁹⁵
LL-7 Phone patch unit for SP-8	153.00	139 ⁹⁵
YF-115C 500 Hz CW Collins mech filter	173.00	159 ⁹⁵
YF-1155-02 2.5 KHz SSB Collins mech fil	173.00	159 ⁹⁵
YH-77ST Open-air type stereo headphones	51.95	
FT-900CAT Xcvt/rem/mic/tune/Collins/fil Dmwf	1819.00	999 ⁹⁵
XF-110C 500 Hz filter FREE with FT-900/CAT until gone!		
YSK-900 remote kit FREE with FT-900/CAT until gone!		
FP-1023 23A switching ps w/fan, 25A surge	169.00	159 ⁹⁵
FP-1025A 20A switching ps, 25A surge Dmwf	199.00	149 ⁹⁵
FP-1030A 25A ps, 30A surge w/meters	269.00	249 ⁹⁵
CT-26 Mic adapter cable; modular to 8-pin	22.95	

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DVS-2 Digital voice recording module	238.00	219 ⁹⁵
FC-800 External long wire auto tuner	525.00	439 ⁹⁵
FIF-232C Interface for RS-232	95.95	
MD-100A8X* Desk mic w/tone control	138.00	129 ⁹⁵
CT-20 Mic cable for use with MD-1C8	22.95	
MH-3188J Extra hand mic; FT-900	39.95	
MMB-20 Mobile mount	34.95	
SP-6 External speaker w/filter	157.00	144 ⁹⁵
LL-5 Phone patch unit for SP-5	143.00	129 ⁹⁵
SP-7 Mobile speaker	40.95	
TCXO-3 TCXO unit; FT-900	79.95	
XF-110C 455 KHz 500 Hz CW filter .Dmwf	157.00	144 ⁹⁵
XF-110CN 455 KHz 250 Hz CW filter	157.00	144 ⁹⁵
XF-110S 455 KHz 2.6 KHz SSB filter	157.00	144 ⁹⁵
YF-007FG Mobile fil 3-30 MHz whip	157.00	69 ⁹⁵
YF-101 2nd IF 2.6 KHz SSB fil; FT-900 .Df	179.00	129 ⁹⁵
YH-77ST Open-air type stereo headphones	51.95	
YSK-900 20' rem mtg kit/tnk mtg bkt .Dmwf	68.95	49 ⁹⁵
MMB-62 Remote control panel bkt	39.95	
FRB-757 External relay box	31.95	
FT-840 Xcvt/SW Rcvr	1029.00	749 ⁹⁵
FP-1023 23A switching ps w/fan, 25A surge	169.00	159 ⁹⁵
FP-1025A 20A switching ps, 25A surge Dmwf	199.00	149 ⁹⁵
FP-1030A 25A ps, 30A surge w/meters	269.00	249 ⁹⁵
FC-10 External coax fed auto tuner	429.00	379 ⁹⁵
FC-800 External long wire auto tuner	525.00	439 ⁹⁵
FIF-232C Interface for RS-232	95.95	
FM-747 FM unit	62.95	
MD-100A8X* Desk mic w/tone control	138.00	129 ⁹⁵
*Cable needed for FT-840 contact service for info		
MMB-20 Mobile mount	34.95	
SP-6 External speaker w/filter	157.00	144 ⁹⁵
SP-7 Mobile speaker	40.95	
TCXO-4 TCXO unit	99.95	
YF-112A 6 KHz AM filter	127.00	119 ⁹⁵
YF-112C 500 Hz CW filter	127.00	119 ⁹⁵
YH-77ST Open-air type stereo headphones	51.95	
CT-11 Cable - FL-7000 to FT-890/900	19.95	
E-767 Cable - FL-7000/767/990/1000/MP	16.95	
FAS-1-4R Remote antenna selector	143.00	129 ⁹⁵
FC-757AT Auto ant tuner w/memory	585.00	449 ⁹⁵
Quadra System VLP/1000 160-6 amp/ps/tuner	5990.00	3999 ⁹⁵
MR-1000 Quadra system mounting rack	299.95	
FRG-100B 1-30 MHz shortwave receiver	739.00	619 ⁹⁵
FM Unit-100 FM unit	47.95	
TCXO-4 TCXO unit	99.95	
YF-110CN/XF-F 250 Hz CW xtal filter	157.00	144 ⁹⁵
YF-115C 500 Hz CW Collins mech filter	173.00	159 ⁹⁵
XF-455MC 600 Hz CW filter; FT-650	169.00	69 ⁹⁵
YA-30 1.8-30 MHz broadband dipole ant	269.00	239 ⁹⁵
YH-77ST Open-air type stereo headphones	51.95	
YS-60 1.8-60 MHz 2kw PEP wattmeter	139.00	129 ⁹⁵
YS-500 140-520 MHz 200W PEP wattmeter	114.00	109 ⁹⁵
FT-736R 25w 2m/430 full dpl Xcvt/ps/mic Dmwf	2449.00	1599 ⁹⁵
AD-3 100w 2m/440 duplexer	52.95	
E-736 DC cable	16.95	
FEX-736-50 6m module	317.00	279 ⁹⁵
FEX-736-20 1200 MHz module	349.00	309 ⁹⁵
FEX-736-1.2 1.2 GHz module	619.00	539 ⁹⁵
FIF-232C Interface for RS-232	95.95	
FIS-8 Encoder/decoder	62.95	
FVS-1A Voice synthesizer	43.95	
Keyer-B Electronic keyer unit	26.95	
MH-188 Extra hand microphone	30.95	
SP-767 Speaker w/audio filters	110.00	99 ⁹⁵
TV-736 1.2 GHz ATU converter	205.00	189 ⁹⁵
FT-290R Mk II 25w 2m FM/SSB Xcvt/TP	749.00	629 ⁹⁵
CSC-19 Soft case	16.95	
FBA-8 Holder for 9 C-cell nicads	39.95	
NC-26B Wall charger for FBA-8	9.95	
FTS-7A Encoder/decoder; current units	44.95	
FT-2000 35/10w 440.1.2GHz FM Xcvt/TP	899.00	749 ⁹⁵
FRC-4 DTMF pager unit; 5200/6200 Dmwf	47.00	14 ⁹⁵
FIS-22 CTCSS decode unit	68.95	

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MH-2788 Extra TTP mic w/8-pin plug	65.95	
MW-2* Wireless rem control mic	162.00	69 ⁹⁵
* Requires jumper modification		
MMB-53 Mobile mtg bkt for MW-2	8.95	6 ⁹⁵
SP-7 External speaker	40.95	
YSK-1L Sep kit w/18' cable; FT-5200/6200	58.95	
FT-8100R 50/35w 2m/440 FM Xcvt/TP	699.00	499 ⁹⁵
ADMS-20 Windows programming software	39.95	
CT-39 Packet cable	9.95	
FIS-22 CTCSS decode unit	68.95	
MEK-2 Mic extension kit	42.95	
MMB-60 Quick release mobile bracket	31.95	
YSK-8100 Remote separation kit	69.95	
FT-8500 50/35w 2m/440 FM/FS10 dxt TT	859.00	399 ⁹⁵
ADMS-20 Windows programming software	39.95	
CT-39 Packet cable	9.95	
FS-10 Extra deluxe mic for FT-8500	138.95	129 ⁹⁵
FIS-22 CTCSS decode unit	68.95	
MW-2788 TTP mic w/8-pin plug	65.95	
MEK-2 Mic adapt kit; 8500/MH2788	42.95	
MH-39A6J Extra regular mic; FT-8500	104.95	99 ⁹⁵
MMB-60 Quick release mobile bracket	31.95	
SP-7 External speaker	40.95	
YSK-8500 Remote separation kit	69.95	
MMB-62 Remote control panel bracket	39.95	
MH-1508 Autodial TTP microphone	75.95	
FT-3000M 70w 2m FM Xcvt/TP/ext rcv	542.00	399 ⁹⁵
ADMS-20 Windows programming software	39.95	
CT-39 Packet cable	9.95	
DVS-4 Digital voice recording module	47.95	
FIS-17A CTCSS decode unit	47.95	
FT-2500M 50w 2m FM Xcvt w/TP mic	409.00	199 ⁹⁵
2400 Mic Cable 2' packet cable	9.95	
FRC-6 DTMF pager unit	47.00	19 ⁹⁵
FIS-17A CTCSS decode unit	47.95	
MH-27A8J Extra TTP mic w/modular plug	60.95	
SP-7 External speaker	40.95	
FT-712/Vertex 10A switching ps, 12A surge	135.00	129 ⁹⁵
FP-1023 23A switching ps w/fan, 25A surge	169.00	159 ⁹⁵
FP-1025A 20A switching ps, 25A surge Dmwf	199.00	149 ⁹⁵
FP-1030A 25A ps, 30A surge w/meters	269.00	249 ⁹⁵
FIS-27 CTCSS dec unit; 2200/7200	47.95	
LF-1 Mobile 13A DC noise filter	26.95	
MLS-100 Mobile speaker	45.95	
SP-3 Small mobile speaker	23.95	
SP-4 Mobile speaker	31.95	
VXR-5000VADC/Vertex 25w 2m FM repeater	1635.00	1199 ⁹⁵
VXR-5000UCD/Vertex 25w 440 FM repeater	1635.00	1199 ⁹⁵
VXR-5000U/TC/Vertex 25w 440 FM rpt w/ps	1909.00	1399 ⁹⁵
Repeaters require service dept. set-up; \$72 minimum		
COM ID-8 Auto Morse code ID'er	69.95	
MR-KIT-19 19' rack mtg kit; VXR repeater	218.00	199 ⁹⁵
VXD-40UB/Vertex 440 duplexer (untuned)	222.00	199 ⁹⁵
Tuning cable; VXD-40UB (specify freqs)	50.95	
VX VPL-1 PC programming cable	65.95	

Accessories for FT-208R/708R

FNB-2A Nicad battery packDm \$45.95

Accessories for 09-series/03-series

FNB-4A 500ma 12v battery	\$62.95	
FIS-6 Encoder/decoder; 09-series	35.00	9 ⁹⁵
MMB-21 Mobile bracket; also for 727R	16.00	4 ⁹⁵

Accessories for FT-26/415/416/530

CA-8 2 chg sleeves; NC-50/416/530	\$27.95	
CLIP-3 Belt clip	7.95	
CSC-50 Vinyl case; 415/416/FNB25	16.00	2 ⁹⁵
FBA-12 AA cell holder	19.95	
FT-23R-17 2.5w 2m FM HT/FNB-17/cgr	240.00	169 ⁹⁵
FT-23R-12 5w 2m FM HT/FNB-12S/cgr	257.00	199 ⁹⁵
FT-33R 5w 2m FM HT/batt/cgr	369.00	299 ⁹⁵
FT-411E 2.5w 2m HT/FNB-17/cgr/TP	305.00	229 ⁹⁵
FT-411E/HP 5w 2m FM HT/FNB-12S/cgr/TP	313.00	259 ⁹⁵
FT-911 1w 1.2 GHz FM HT/batt/cgr/TP	569.00	469 ⁹⁵

PRICE LIST

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Accs for FT-23R/33R/73R/411E/811/470/911	Reg	Sale
CLIP-1 2 charging sleeves; NC-50/411E/470.....	\$27.95	
CA-19 1 Belt clip	7.95	
CSC-28 Soft case; 23R/33R/73R w/FNB-12S	16.95	
CSC-35 Soft case; FT-411E w/FNB-17 Dmwfv	16.00	95
CSC-37 Soft case; FT-411E w/FNB-12S/14	16.95	
CSC-48 Soft case; 23R/33R/73R w/FNB-17	16.95	
FBA-17 AA battery holder	19.95	
FNB-12S 600ma 12v (5w) battery	55.95	
FNB-14 1000ma 7.2v battery	55.95	
FNB-17 600ma 7.2v battery	34.95	
FTS-12 Encoder/decoder for FT-23R/33R/73R	60.95	
FTS-17A Tone squelch/pager; FT-411E	47.95	
FTT-4 DTMF (TTP) unit for FT-23/33R	48.95	
LCC-25 Leather case for FT-411E	51.95	34
MH-30C2B Speaker/microphone	45.95	
MH-32A2B Compact lapel spkr/mic	30.95	
MH-34C2B Compact lapel speaker/mic	30.95	
MH-35A2B Spkr mic/clip/earphone jack	39.95	
MMB-46 Mobile hanger for FT-470	25.00	95
NC-18B/NC-65B Wall charger for FNB-12S	14.95	
NC-28B Extra wall charger for FNB-17	14.95	
NC-34B Wall charger for FNB-14	14.95	
PA-6 Mobile DC adapter/cgr; FNB-14/17	31.95	
YH-2 Lightweight VOX headset w/mic	30.95	
FT-10/41B-A06 5w 2m HT/6 keypad/30 ch	319.00	259
FT-10/40B-A16 2.5w 2mHT/16key/30ch	339.00	239
FT-10/41B-A16 5w 2m HT/16 keypad/30 ch	349.00	199
FT-10/40B-A16D 2.5w 2mHT/16key/99ch	369.00	259
FT-10/41B-A16S 5w 2mHT/16 keypad/99ch	379.00	299
FT-10/40B-A16S 2.5w 2m/16key/99ch/DVR	389.00	279
FT-10/41B-A16S 5w 2m/16 key/99ch/DVRS	399.00	319
FT-40/41B-A16 5w 440 HT/16key/99ch	409.00	289
FT-40/41B-A16S 5w 440/16key/99ch/DVRS	429.00	299
FT-50RD/41B 5w 2m/440 HT/FNB41/FTT-12	449.00	299
ADMS-1D Windows programming software	39.95	
CA-15 Charging stand; FT-10/40/50	27.95	
NC-60B Wall charger; FNB-40/41/CA-15	14.95	
CLIP-10 Spring loaded belt clip	7.95	
CN-2 BNC to SMA adapter; FT-10/40	8.95	
CN-3 BNC to SMA adapter; FT-50R	8.95	
CSC-68 Soft case; FNB-41/FBA-15	16.95	
CSC-69 Soft case; FNB-40	16.95	
CSC-V10 Cordura soft case; FT-10/40/50	27.95	
CT-20 Cloning cable	10.95	
CT-30 Microphone Y adapter	10.95	
EDC-5B DC adapter w/noise filter	26.95	
EDC-6 DC adapter; plug & wire only	7.95	
FBA-15 AA battery holder	19.95	
FEP-10 Earphone	9.95	
FNB-40 650ma 6v battery	48.95	
FNB-41 600ma 9.6v (5w) battery	58.95	
FNB-42 1100ma 9.6v (5w) battery	62.95	
FNB-V47 1100ma 7.2v battery w/belt clip	55.95	
PA-17 Battery cable extender	57.95	
FNB-49 600ma 6v battery	38.00	19
FTT-10/A06 6-key pad/enc/30ch; FT-10/40	25.95	
FTT-10/A16 16-key pad/enc/30ch; FT-10/40	34.95	
FTT-10/A16D 16-key pad/enc/dec/99ch; 10/40	62.95	
FTT-10/A16S 16ky pad/enc/dec/99ch/DVR; 10/40	81.95	
FTT-12 16-key keypad/dec/DVR; FT-50R	62.95	
LCC-10C Leather case/belt clip; 50/FNB41/V47	31.95	
LCC-10S Leather case/swivel; 50/FNB41/V47	31.95	
LCC-11S Leather case/swivel; FT50/FNB40	31.95	
MH-30C2B Speaker/mic; use CT-30 also	45.95	
MH-34B4B Speaker/mic	30.95	
MH-37A4B Earpiece/microphone	30.95	
NC-50 1-hour dual slot charger	92.95	
CA-14 2 charging sleeves; NC-50	26.95	
RH-1 Black rubber case protector	7.95	
RH-1R Orange rubber case protector	7.95	
VC-23 VOX headset	62.95	
YHA-54 Replacement 2m/440 BNC duck	16.95	
FT-11R 1.5w 2m HT/FNB-31/cgr/TTP	389.00	249

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FT-11R/HP 5w 2m HT/FNB-38/cgr/TTP	Reg	Sale
FT-51R/HP 5w 2m/440 HT/FNB-38/cgr/TTP	399.00	269
51R Clone/CT-35 Clone cable; FT-11/41/51R	639.00	379
ADMS-1D Windows programming software	39.95	
CD-2 Mobile rapid charger; FT-11/41/51R	103.95	
CSC-61 Case; 11R/41R/FNB-33/FBA-14	16.95	
CSC-62 Soft case for FT-11R/41R/FNB-31	16.95	
CSC-66 Soft case; FT-51R/FNB-33/38/FBA-14	19.95	
CSC-67 Soft case for FT-51R/FNB-31	19.95	
EDC-12 DC adapter; FT-11R/41R/51R	38.95	
FBA-14 AA battery holder	19.95	
FNB-31 600ma 4.8v battery	47.95	
FNB-33 1200ma 4.8v battery	62.95	
FNB-38 600ma 9.6v (5w) battery	75.95	
FTS-26 CTCSS decoder	47.95	
MH-29A2B LCD display spkr/mic; 51R	106.95	
MH-30C2B Speaker/microphone	45.95	
MH-32A2B Compact lapel spkr/mic Dmwfv	30.95	
MH-34C2B Compact lapel speaker/mic	30.95	
MH-35A2B Spkr mic/clip/earphone jack	39.95	
MH-37B2B Earpiece/microphone	30.95	
NC-34B Wall charger for FNB-33	14.95	
NC-38B/NC-65B Wall charger for FNB-38	14.95	
NC-50 1-hour dual slot charger	92.95	
CA-10 2 charging sleeves; NC-50/11/41/51	14.95	
NC-55B Wall charger for FNB-31	14.95	
VC-22 Headset w/VOX	62.95	
YHA-54 Replacement 2m/440 BNC duck	16.95	
VX-1R 500mw 2m/440 submini HT/lith ion	349.00	229
ADMS-1D Windows programming software	39.95	
CN-3 BNC to SMA adapter	8.95	
CSC-71 Soft case for VX-1R	19.95	
CT-44 2-pin spkr/mic adapter	12.95	
EDC-15 DC adapter	38.95	
FBA-20 Battery holder	22.95	
FEP-10 Earphone	9.95	
FNB-52LI Extra lithium ion battery	36.95	
MH-34B4B Speaker/mic	30.95	
MH-37A4B Earpiece/microphone	30.95	
NC-66B 2 hour wall charger	18.95	
VC-25 VOX headset	62.95	

ANTENNA ROTORS

G-450XL 10 sq ft antenna rotor/5-wire	Dfv	\$269.00	239
G-450A 10 sq ft antenna rotor/5-wire		289.00	259
G-500A 12 sq ft elevation rotor/8-wire		319.00	254
*Sale price with \$25 instant coupon thru 11/30/98			
G-800S Med/hvy duty 450 degree 17sq ft/5-wire		399.00	*314
*Sale price with \$25 instant coupon thru 11/30/98			
G-800SDX Med/hvy duty 17sq ft/presets/5-wire		499.00	*404
*Sale price with \$25 instant coupon thru 11/30/98			
G-1000SDX HD 450 degree 23sq ft/presets/5-wire		599.00	*494
*Sale price with \$25 instant coupon thru 11/30/98			
G-2800SDX HD 450 degree 34sq ft/presets/8-wire		1329.00	*1114
*Sale price with \$25 instant coupon thru 11/30/98			
G-5400B Light/med 11sq ft az/el/2x8-wire		619.00	*514
*Sale price with \$25 instant coupon thru 11/30/98			

Sep Kit	Separation kit for G-5400B	23.95
GA-2500	Tower absorber joint; 450A/XL/800S/SDX	79.95
GA-3000	Tower absorber joint; 1000SDX/2800SDX	119.95
GC-038	Mast clamp; 450/800/1000/5400B ..	31.95
GC-048	Mast clamp; G-2800SDX	47.95
GS-050	50mm thrust bearing; mast 1/4"-2"	31.95
GS-065	65mm thrust bearing; mast 1/4"-2 1/2"	47.95
GS-232	Interface; G-800/1000/2700/2800SDX	356.00
GS-232	Interface for G-5400B	562.00

See BELDEN for rotor cable

ZENITH (ZEN)

A-8477 75 ohm high-pass filter	Dmwfv	95
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zm Xpressions (ZMX)

What is your TNC doing? Book	\$15.00
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CLOSE-OUTS

ADI AT-600 2.5w 2m/440 HT/batt/cgr/TTP mwfv	249
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CLOSE-OUTS - continued

Reg	Sale
AEA IDR-96 5w 441.05 data Xcv/9600	349
AEA KK-1 Keyboard keyer for IBM PC	169
AEA PCB-88 IBM plug-in packet adapt	99
ALI DJ-C4T* 300mw cc size 440 HT/lith ion mwfv	69
*No internal spkr DJ-C4T - must use earphone	
ALI EDC-52 Quick charger; DJ-G1T	99
ALI EME-10 Headset/VOX/PTT; 160/560/580/582 mwfv	59
ALP DX-SWL-S 90-13m 40' SWL sloper mwfv	49
AME DL-1500 1500w dummy load	39
AME DL-1500F 1500w dummy load/fan mwfv	59
AZD PCS-7300H 35w 440 FM/TTP mic	249
AZD PCS-96000 35w 440 FM/9600 baud	599
B&K 541 Component comparator	249
B&K 1045 0-16V, 0-10A power supply	179
B&K 2005A RF generator	299
B&K 2831A Digital bench multimeter	209
B&K 2870 Survivor DMM/bargraph/true RMS m	109
BEN ST-3 Sgl lever key paddle, gold plate .mf	199
BEN ST-4 Sgl lever/bk blade/gold comp	99
CEN CP-1 Cricklet Pulser Stn tuning acc	59
CES 410 Personal Patch interconnect	119
CHA 5095A Base mon ant/5' trimast/50' cbl mwfv	49
CHR AH-50 5w 6m FM HT w/nicad batt mwfv	149
CMT CMR-241 2m/440 6.5' rpt ant	119
CMT CSW-20N 0-1300MHz N coax switch	59
COB CP-912 900MHz dig sp spec cordless mf	169
CYS CSY-700 Simplex interconnect	229
CUS 20-3CD 20m, 3 el, 20' boom, 8 db	349
CUS 20-4CD 20m, 4 el, 32' boom, 10 db	429
CUS 220-QK Quack stacking kit for 4 220Bs w	69
CUS 617-SK Harness/pwr divider; 2 6176Bs mwfv	69
CUS CG-144A 2m 3/4" mt Gold coil/whip only	99
CUS PS-A4 Remote polarity switch	69
DEL Triplate Laptop GPS/Street Atlas soft mwfv	139
DIA HB-650 HT door mt; side wind/glv bx	59
GRY Yacht Boy 400 Port AM/FM/SW/LW Rcvr wfv	179
HUS 67-150-4 7db 167-174 base ant	99
HUS 66-450-1 6db 450-458 base ant	99
HUS 66-450-4 6db 470-478 base ant	99
HYG 189S GRK-88 Ground radial kit	64
HYG 190S RRR-88 Roof radial kit	74
HYG 191S 160M-88 160m kit for 188S mwfv	134
HYG 216S 216SAT 2m 16el 145.9MHz bm .fv	149
HYG 218S OSCAR Link Oscar ant system	369
HYG 231S 70-31DX 304 31el bm, 24' bm mwfv	149
HYG 232S 215DX 2m 15 el beam, 28' bm mwfv	139
HYG 244S BN4000D 4kw PEP 160-102 dip bin mwfv	69
HYG 302-2 CD-45-II 220v med duty rotor	279
HYG 331S V-42R 2m/440 type N base ant w	119
HYG 335S-1 V-2R 2m ground plane ant	74
HYG 337S-1 V-4R 4m ground plane ant mwfv	74
HYG 371S Discoverer 7-1 30 or 40m rotate dip mfv	199
HYG 372S Discoverer 7-2 40m 2 el 23' bm	454
HYG 373S Discoverer 7-3 3rd el; 372S; 35bm wfv	279
HYG 380S 2BDQS 80/40m 101' trap doublet f	89
HYG 381S 19PD 80-10 233' 1-band port dip mwfv	199
HYG 383S 5BDQS 5-band 94' trap vertical wfv	159
HYG 390S TH2MK3S 2 el, 6' boom	244
HYG 393S TH5MK2S 5 el, 19' bm w/balun	524
HYG 1009AA LP1009AA 13-30MHz 12el LP m	989
HYG 2400-15S 6240015S Bm mic/headset mwfv	89
HYG 51467-10 LW mast support; HAM I/V/TX m	64
HYG DX-77 40-10m 75w 72d 29' no radials mwfv	319
HYG LC-160Q 160m loading coil; 182S	69
HYG V-3R 220 ground plane antenna	79
HYG V-6R 6m 3db deluxe base antenna	149
ICO BP-35 Drop-in rapid charger	119
ICO BP-2 425ma 7.2v long life battery	59
ICO BP-5 425ma 10.8v high power battery	79
ICO BP-5A 425ma 10.8v direct chg batt	79
ICO BP-7 425ma 13.5v 5w battery	99
ICO BP-8 800ma 8.4v long life battery	89
ICO BP-70 270ma 13.2v batt; 2GAT/3ZAT	79
ICO BP-82 7.2v 300ma battery	49

CLOSE-OUTS - continued

ICD BP-83	7.2v 600ma battery	399 ⁹⁵
ICD BP-84	7.2v 1000ma battery	399 ⁹⁵
ICD BP-101	700ma 7.2v batt; Delta-1A	199 ⁹⁵
ICD BP-131	900ma 7.2v batt/mic; W21	279 ⁹⁵
ICD BP-132	600ma 12v batt/mic; W21	349 ⁹⁵
ICD BP-132A	600ma 12v battery/mic	259 ⁹⁵
ICD BP-160	700ma 7.2v battery	499 ⁹⁵
ICD BP-171	4.8v 700ma battery	599 ⁹⁵
ICD CR-64	High stab osc xtal; 728	799 ⁹⁵
ICD FL-32A	500 Hz CW filter; R-71A	59 ⁹⁵
ICD FL-63A	250 Hz CW filter; R-71A	79 ⁹⁵
ICD HM-55A	Speaker/mic w/TTP	109 ⁹⁵
ICD HM-75	Sprk/mic w/rem cont; W21AT	69 ⁹⁵
ICD HM-90A	Wireless microphone	109 ⁹⁵
ICD IC-26XAT/HP	7w 2m HT/batt/cgr/TTP	69 ⁹⁵
ICD IC-F10-1	2w 146-174MHz 24 ch HT	69 ⁹⁵
ICD IC-F20-2	2w 440-470MHz 24 ch HT	69 ⁹⁵
ICD IC-TP-7HP	4w 2m/440 HT/batt/cgr/TTP	69 ⁹⁵
ICD S-33	External speaker	129 ⁹⁵
ICD UI-7	AM/FM module for IC-728	189 ⁹⁵
ICD UI-8	FM unit; R-72A	159 ⁹⁵
ICD UT-67	Tone squelch unit	69 ⁹⁵
ICD UT-70	Tone encoder/decoder; D1A	69 ⁹⁵
ICD UT-76	Tone squelch unit; D100H	69 ⁹⁵
ICD UT-85	Tone squelch unit	69 ⁹⁵
JPS NF-60	Auto DSP audio spec notch filt	109 ⁹⁵
JPS NIR-10	Dlx noise/reduce DSP Bf filter	189 ⁹⁵
JPS NRF-7	Noise reducer and filter unit	159 ⁹⁵
JSC JRR-520	5-wire rotor cbl mw, 500 ft. Roll	449 ⁹⁵
KAC 505-AT	Internal automatic ant tuner	219 ⁹⁵
KAC 505-DSP/505DSP2	PC cont HF Xcvr/mic mw	1749 ⁹⁵
KAN DE-19K2/9K6	19.2/9600 baud modem	89 ⁹⁵
KAN Data Engine	TNC w/no modems	229 ⁹⁵
KAN DE-19K2/9K6	19.2/9600 baud modem	279 ⁹⁵
KEN AT-850	80-10m int auto tuner; TS-850S	249 ⁹⁵
KEN BC-15A	Rapid cgr; PB-13/14/17/18	89 ⁹⁵
KEN BT-10	6 AA alk batt case; 235A	29 ⁹⁵
KEN DFK-7A	Dlx 22' rem cbl kit; 255A/455A	74 ⁹⁵
KEN DFK-7B	Dlx 22' rem cbl kit; TM-733A	94 ⁹⁵
KEN MA-5	5band 200w PEP HF mob ant	139 ⁹⁵
KEN PB-32	600ma 6v battery	19 ⁹⁵
KEN PB-36	7.2v 950ma nicad; 235A	34 ⁹⁵
KEN PC-1A	8-pin phone patch	129 ⁹⁵
KEN SC-37	Soft case; 22/42AT/PB30/32	19 ⁹⁵
KEN TH-42AT	2.5w 440HT/batt/cgr/TTP	299 ⁹⁵
KEN TU-8	CTCSS tone unit; 450S/690S	49 ⁹⁵
KEN UT-10	10w 1.2 GHz module; TS-790A	549 ⁹⁵
KEN YG-455C-1	500 Hz CW filt; 450/690	149 ⁹⁵
KEN YK-88S-1	2.4 KHz SSB filt; 450/690	129 ⁹⁵
KEN YK-88C	500 Hz CW filter; R-5000	129 ⁹⁵
KEN YK-88CN	270Hz CW filter; R-5000	94 ⁹⁵
KEN YK-88SN	1.8 KHz SSB filt; R-5000	129 ⁹⁵
KLM 40-10V	40/20/15/10m 26.5' vertical	249 ⁹⁵

Reg Sale

CLOSE-OUTS - continued

KLM JV-2	2m 5' vertical ant, 3 db	49 ⁹⁵
KLM JV-2X	2m 11' vertical ant, 5 db	79 ⁹⁵
KLM JV-220X	220 7' vertical ant, 5 db	79 ⁹⁵
MAG Meridian XL	GPS/plot/detach ant	299 ⁹⁵
MAX FRS-114	FRS handheld	69 ⁹⁵
MFJ 47C	Mailbox 512K mem; 1270/1274	99 ⁹⁵
MFJ 217	SWR analyzer, 30-50 MHz	29 ⁹⁵
MFJ 218	SWR analyzer, 150-170 MHz	39 ⁹⁵
MFJ 219N	SWR analyzer, 440 MHz/type N	69 ⁹⁵
MFJ 323	Keep-it-up battery maintainer	19 ⁹⁵
MFJ 346	600 MHz LCD frequency counter	99 ⁹⁵
MFJ 411	Personal Morse Code Tutor	49 ⁹⁵
MFJ 1268	IBM PC memory keyer	19 ⁹⁵
MFJ 1292	Video digitizer for IBM	119 ⁹⁵
MFJ 1680K	Windows soft package; Ken	69 ⁹⁵
MFJ 1680Y	Windows soft package; Yaesu	99 ⁹⁵
MFJ 8621X1	APRS ready VHF data radio/145.79	109 ⁹⁵
MIR A-1015R	6m FM 2/80w rpt amp	469 ⁹⁵
MIR B-23G	2m FM/SSB 2/30w amp/preamp	109 ⁹⁵
MIR C-5012G	220 FM/SB 50/120w amp/p mw	259 ⁹⁵
NYE MBV-B	As MBV-A, without meters	649 ⁹⁵
OPT R-10	30-2000MHz FM Interceptor	249 ⁹⁵
OPT SSB-220A	SSB/gen purp 3GHz ctr	229 ⁹⁵
PAL MSB-3	Magnetic switch rcv balun	79 ⁹⁵
PAL P-405	1.8-54MHz 20db 9v Rcv preamp	59 ⁹⁵
PAL PFS-1	1.8-150MHz field strength meter	169 ⁹⁵
PAL PK-203	Brass Jones single lever key	179 ⁹⁵
PAL SB-4	2kw 1.7-30 MHz 4:1 balun/SO-239	79 ⁹⁵
PAT PC-16000	HF Xcvr/dig modem/kybrd	1399 ⁹⁵
PEC Spectrum	FCF database CDROM	9 ⁹⁵
RAN RCI-6060	25w VHF marine Xcvr/scan	129 ⁹⁵
RAN RCI-8000	5w VHF marine handheld	129 ⁹⁵
RCO 700	Automatic morse code identifier	79 ⁹⁵
RFC 2-23	2m FM/SSB 2/30w amp/pre	79 ⁹⁵
RFC 2/70	2m/440FM 3/30/5/20w HT amp	189 ⁹⁵
RFC 4-110	440 FM 10/100w N amp/pre	299 ⁹⁵
RFC 4-310	440 FM 30/100w N amp/pre	279 ⁹⁵
RFC 144	2m FM mini-amp 2/30w amp	89 ⁹⁵
RFC 144P	2m FM mini-amp 2/30w amp/pre	109 ⁹⁵
RFC 440P	440 FM mini-amp 3/20w amp/pre	129 ⁹⁵
RFC MAX-AMP-10	2m FM/SB 10/150w amp/p mw	269 ⁹⁵
RFC MAX-AMP-45	2m FM/SB 45/150w amp/p mw	249 ⁹⁵
RFC UHF-50	440 3/50w FM HT N amp	219 ⁹⁵
RFL VHF1-60	2m 1/60w FM HT amp	179 ⁹⁵
RFL DF-4000	4kw PEP low pass filter	89 ⁹⁵
RFL DF-7000	7kw PEP low pass filter	99 ⁹⁵
RFL HL-35P	2m 5-5/20-35w amplifier	49 ⁹⁵
RFL HL-35V	2m 5-5/20-35w amp/pre	69 ⁹⁵
RFL HL-36U	440 5-12/30w amplifier	149 ⁹⁵
RMS CN-220	1.8-225MHz 1.5kw PEP meter	89 ⁹⁵
RMS PA-546	2m 5/45w amplifier	69 ⁹⁵
ROS WINRADIO	5M-1.3G Rcv card/swt/cbl bld	399 ⁹⁵
SGC 55-45	QMS Quick universal mt sys	399 ⁹⁵
SGC 55-46	QMS-1 Quick mt sys w/SG230	749 ⁹⁵

Reg Sale

CLOSE-OUTS - continued

SON AN-3	Aircraft active receive ant	399 ⁹⁵
SON ICF-SW55	AM/FM/SW port receiver	349 ⁹⁵
STA C-108A	200mw 2m FM HT	199 ⁹⁵
STA C-168A	Dlx submini 2m HT/batt/cgr/TTP	279 ⁹⁵
STA C-178A	2m/440 FM mini HT/TTP	349 ⁹⁵
STA C-508A	280mw 2m/440 FM HT	259 ⁹⁵
STA C-558A	2m/440 HT/batt/cgr/TTP/ctcss	499 ⁹⁵
STA C-628A	440/1.2 HT/batt/cgr/TTP/ctcss	599 ⁹⁵
STA C-5900DA	45w 6m/50w 2m/35w 440 FM	799 ⁹⁵
STA CHP-150	Headset mic/VOX; 156A	59 ⁹⁵
STA CNB-162	Mini 12v 600ma nicad; 168A	79 ⁹⁵
STR 1350	1-1300 MHz freq counter	109 ⁹⁵
TRI BC PER-380	Standby UPS 280VA	69 ⁹⁵
TRI BC PER-420	Standby UPS 420VA	109 ⁹⁵
TRI IBC-12	Rack mt 12-out surge suppress	69 ⁹⁵
UNI BCR-22	Pre-prog warning scan/ACP	99 ⁹⁵
UNI BCT-10	Pre-prog hiway info sys scan	129 ⁹⁵
UNI EXP-9100	900MHz dig spread spec	189 ⁹⁵
VEC HF-6000SK	1kw HF amplifier w/QSK	1249 ⁹⁵
YAE ATU-2	Internal ant tuner; FT-900	249 ⁹⁵
YAE FAS-1-4R	Remote ant selector	129 ⁹⁵
YAE FC-757AT	Auto ant tuner w/memory	449 ⁹⁵
YAE FNB-49	600ma 6v battery	19 ⁹⁵
YAE FP-1025A	20A switching ps, 25A surge	149 ⁹⁵
YAE FRC-4	DTMF pager unit; 5200/6200	14 ⁹⁵
YAE FRC-6	DTMF pager unit; 2500/7400	19 ⁹⁵
YAE FS-10	Extra deluxe mic; FT-8500	129 ⁹⁵
YAE FT-10/40B-A16	2.5w 2mHT/16ky/30ch	239 ⁹⁵
YAE FT-10/40B-A16D	2.5w 2mHT/16ky/99ch	259 ⁹⁵
YAE FT-10/40B-A16S	2.5w 2m/16ky/99ch/DVR	279 ⁹⁵
YAE FT-11R	1.5w 2m HT/FNB-31/cgr/TTP	249 ⁹⁵
YAE FT-23R-17	2.5w 2m HT/FNB-17/cgr	169 ⁹⁵
YAE FT-40/41B-A16D	5w 440 HT/16ky/99ch	289 ⁹⁵
YAE FT-40/41B-A16S	5w 440/16ky/99ch/DVR	299 ⁹⁵
YAE FT-411E	2.5w 2m HT/FNB17/cgr/TT	229 ⁹⁵
YAE FT-736R	25w 2m/430 dplx Xcvr/ps/mic	1599 ⁹⁵
YAE FT-900/CAT	Xcvr/rem/mic/tune/Colfilt	999 ⁹⁵

XF-110C 500 Hz filter FREE with FT-900/CAT until gone!
YSK-900 remote kit FREE with FT-900/CAT until gone!

YAE FT-1000 Xcvr/ps/tuner/kyr/mic/XF-AB .m 3399⁹⁵
YAE FT-1000MP/DC HF Xcvr/EDSP/tuner .m *2599⁹⁵

*Sale price with \$100 instant coupon thru 11/30/98

YAE FTS-6 Encoder/decoder; 09-series .m 9⁹⁵
YAE G-450XL 10 sq ft antenna rotor/5-wire fv 239⁹⁵
YAE MH-39A6J Extra reg mic; FT-8500 .mfv 99⁹⁵
YAE MW-2 Wireless rem control mic .mfv 69⁹⁵
YAE SP-767P Spkr/patch for FT-767GX .mfv 99⁹⁵
YAE TCXO-2 Temp comp xtal osc; 990 .mfv 69⁹⁵
YAE XF-10.9M-202-01 2KHz SB filt; 990 .m 119⁹⁵
YAE XF-110C 455 KHz 500 Hz CW filter mwfv 144⁹⁵
YAE YA-007FG Mobile fg 3-30 MHz whip .mf 69⁹⁵
YAE YF-101 2nd IF 2.6 KHz SSB filter .mfv 129⁹⁵
ZEN A-8477 75 ohm high-pass filter .mfv 9⁹⁵

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ADI AT600 2M/440 HT.....199.95 f CBP262 4A PACK.....12.95 f RBP072 2.5W BATTERY.....19.95 f RBP120A 5W BATTERY.....19.95 f AIM 38305 3-12VDC ADAPTER.....9.95 w ALINCO DRM067 6M 10W XCVR.....219.95 mw DL1300 2M 50W MOBILE.....149.95 m DL1400 2M MOBILE /50W.....149.95 v DR570T 2M/440 XCVR.....299.95 f DX70T HF/EDSA/EBC8/EBC9.....599.95 m DX70T HF/6M XCVR.....559.95 m EB08 MTC BRACKET.....12.95 f EBP20N (26N) 2W BATT.....14.95 v EBP36N BATTERY /5W.....24.95 v EDG37 13.8V POWER CABLE.....6.95 v EDG49 DESK CHARGER.....15.95 mf EDC52 DESK CHARGER.....79.95 f EDC60 DESK CHARGER.....59.95 f EDC88 DC PWR CBL W/FLT.....17.95 v ED54 CABLE KIT(DX70).....24.95 f ED56 REMOTE KIT.....43.95 f EDX2 HF AUTO TUNER.....249.95 fv ESC30 CASE EBP34/35/36N.....8.95 v AMERITRON AL80B HF AMP/SCUFFED.....829.95 v AL800H 1.5K HF AMP.....1,599.95 v QSK7 TR SWITCH.....239.95 f RC54 REMOTE COAX SWITCH.....99.95 v ASTRON RS20A POWER SUPPLY.....79.95 w AZDEN AZ61 6M HT.....299.95 m AZD PB11A 5 WATT BATT.....23.95 v PCST800H 50W 10M XCVR.....269.95 f B&K 820 DIG CAP METER.....199.95 m B&W FL10/1500 1KW LOW-PASS.....45.95 w BIRD 4240165 MISC PART.....19.95 m COURIER M54 VHF HT 151.625.....149.95 m CONNECT SYSTEMS CS900 SIMPLEX AUTOPATCH.....259.95 f CUSHCRAFT PD2N POWER DIVIDER.....49.95 m DAIWA CN460M 2M/440 SWR METER.....71.95 w DP820 2M/440 METER.....199.95 m G601NO TRUNK MOUNT.....49.95 f K9000LRM MOTORIZED MT.....89.95 f MX3000N TRIPLEXER.....71.95 v SK100 SWR METER HF-6M.....119.95 f SK400 2M/440 SWR METER.....91.95 w DIGIMAX D612 FREQ CTR/NO MAN.....169.95 m DRAKE MS8 SPEAKER.....39.95 m R&A SWL RCVR.....819.95 v R&A SWL RCVR/CONVERTER.....919.95 m SW1 SWL RCVR.....199.95 m ESP KL1R000A 1K 110V CONDIT.....119.95 m KL2R000A 2K 110V CONDIT.....199.95 m GRUNDIG YB400 SWL RCVR.....149.95 f HEIL BM1051 HEIL HOST /COM.....59.95 f CC1Y YAESU CABLE HM10.....19.95 v HM104 MIC W/CC1Y.....79.90 v MAL MIC BOOM ARM.....39.95 v HYGAIN 2400155 RADIO HEADSET.....59.95 f ICOM AD15A CHARGE ADAPTER.....19.95 mwf AG1 PREAMP/COMPLETE.....34.95 m AH2A AUTO ANTENNA TUNER.....249.95 mf	AT150 W/OPC137.....359.95 w AT160 AUTO TUNER.....199.95 m BC72 BATTERY CHARGER.....79.95 f BP114 12V/400MA BATTERY.....19.95 m BP2 BATTERY.....9.95 f BP82 2W BATT.....9.95 w BP84 BATT PACK.....39.95 w CM8 (SAME AS THE BP8).....29.95 w ICM2 MARINE XCVR.....129.95 m ICP4AT 440 FM HT.....124.95 w ICW2A DUAL BAND HT.....199.95 m IC228H 45W 2m FM Xcvr.....149.95 w IC2700H 2M/440 MOBILE.....329.95 f IC271A 2M FM/SSB XCVR.....549.95 f IC271H 2M XCVR/PS35.....769.95 mf IC275A 2M FM/SSB XCVR.....899.95 m IC275A 2M FM/SSB XCVR.....879.95 mf IC275A 2M FM/SSB/CR64.....919.95 w IC275H 100W 2M XCVR.....999.95 mf IC28A 2M XCVR/STD MIC.....149.95 f IC28H 2M XCVR.....149.95 m IC280 2 MOBILE (NO MOB MT).....89.95 f IC471A ALL MODE XCVR.....599.95 f IC475A 440 XCVR/CR64.....919.95 w IC707 HF XCVR.....599.95 mf IC725 HF XCVR.....539.95 mf IC725 HF XCVR/FL100.....559.95 mf IC725 HF XCVR/UI7.....559.95 m IC728 HF XCVR.....699.95 mwfv IC728 HF XCVR/FL100.....719.95 mw IC729 HF XCVR.....839.95 v IC729 HF XCVR/FL100.....869.95 f IC730 HF XCVR.....389.95 f IC735 HF XCVR.....659.95 wf IC735 HF XCVR/EX243.....669.95 m IC735 XCVR/CW/NO DOOR.....649.95 f IC736 HF XCVR/6M.....1,249.95 mwfv IC736 HF/6M XCVR/UT30.....1,269.95 v IC736 HF/6M/FL53A/100.....1,289.95 w IC737 HF XCVR.....799.95 mv IC737 HF XCVR/FL100.....819.95 m IC737A HF XCVR.....899.95 f IC738 HF/SERV MAN.....1,019.95 m IC740 HF XCVR/PS.....439.95 f IC745 HF XCVR.....489.95 wf IC746 HF/HF XCVR/FL224.....1,549.95 f IC751 HF XCVR.....649.95 wf IC761 HF XCVR.....899.95 f IC820H 2M/440 FM/SSB.....799.95 m LC117 CASE IC2GKAT.....15.95 m LC59 CASE IC2SAT W/BP82.....15.95 m MB12 MOBILE MOUNT.....19.95 f PS15 POWER SUPPLY.....119.95 w PS15 PS/COMPLETE.....129.95 m PS30 PS NO OPT CABLES.....229.95 f PS55 POWER SUPPLY.....159.95 m R1 COM RCVR (OLDER R1).....399.95 mwfv R1-15 RCVR/BLOCKED.....329.95 wf R1/BA121(800MHZ).....399.95 m R10-05 COMM RCVR HT.....399.95 f R100 RCVR/800 MHZ.....419.95 w R70 SWL RCVR/FL44A.....419.95 w R7000 RCVR RC-12/800MHZ1,059.95 m R7000 25-2000MHZ XCVR.....999.95 v R71A PBT SWL RCVR.....599.95 mvf R71A SWL RCVR/EX310.....559.95 m R7100 COMM RCVR.....1,199.95 fv R8500 1MHZ/2GHZ RCVR.....1,313.95 w UT63 TONE SQUELCH/W2A.....149.95 m KENWOOD AT250 ANT TUNER/SCUFFED.....259.95 v BC15 RAPID CHARGER.....39.95 f BC15A CHARGER.....21.95 m DC6230 FREQ CONTROLLER.....149.95 m H56 HEADPHONES.....39.95 m IF10C COM INTF CORD.....39.95 m IZ232C JA-ISO/NO CORD.....49.95 m KNB7A 800 MIL 12V.....25.95 w	KSC14 RAPID CHGR.....69.95 wf LF30A LOW PASS FILTER.....39.95 m LHA CASE.....19.95 w MC48 MICROPHONE.....39.95 f MC60A DESK MIC.....99.95 v MC90 DESK MIC.....169.95 m PB18 BATT/REFURB.....29.95 v PB32 BATTERY.....9.95 w PB33 BATT.....35.95 w PB34 BATTERY.....29.95 mwfv PB36 BATTERY.....9.95 m P63H CIG CORD.....29.95 v PS50 POWER SUPPLY.....169.95 wf PS53 POWER SUPPLY.....179.95 mw RM1 REMOTE.....49.95 m RM76 CONTROLLER/AS-IS.....39.95 f R2000 SWL RCVR.....399.95 v R2000 SWL RCVR/NO MAN.....389.95 v R2000 SWL RCVR/G-455C.....459.95 v R5000 SWL/SCUFF/VS1.....699.95 m SMC32 SPRK/MIC.....39.95 w TH24AT UHF HT/TONE.....209.95 f TL922A HF AMP/2 3-500Z.....1,299.95 mf TL922A HF AMP/10M.....1,349.95 m TMV7A 2M/440 XCVR.....399.95 m TM221A 2M XCVR.....149.95 f TM251A 50W 2M XCVR/ME1.....239.95 f TM610 440MHZ FM.....249.95 f TR751A 2M /TONE/NO BCKT.....489.95 f TR7600 2 MOBILE.....99.95 f TR7850 2M XCVR.....139.95 f TR7930 2M XCVR /TU-79.....149.95 m TR9000 2M FM/SSB XCVR.....289.95 f TSU5 TONE DECODER UNIT.....51.95 f TS140S HF XCVR.....649.95 mwfv TS140S HF XCVR/YG455C1.....689.95 f TS140S HF/CW FLT/NO MIC.....689.95 w TS140S HF/YG455C1/MB430.....689.95 v TS430S HF XCVR/FM.....579.95 m TS430S HF XCVR/YK88A.....609.95 f TS430S HF/LOADED(CALL).....679.95 f TS430S HF/YK88A/SV.....579.95 m TS440S/AT HF XCVR.....799.95 mvf TS440S/AT HF XCVR/VS1.....819.95 mf TS440S/AT HF XCVR/YK88C.....829.95 mf TS440S/AT HF/CW/SSB FLT.....869.95 f TS440S/AT HF/JUMBY KEY.....699.95 m TS440S/AT HF/SCN/VS1.....889.95 v TS440S/AT HF/YK88C/SN.....869.95 m TS440S/AT HF/YK88CN.....829.95 f TS440S/AT HF XCVR.....829.95 f TS450S/AT HF XCVR.....929.95 mf TS450S/AT HF/CW/SCUFFED.....899.95 m TS450S/AT HF/MB430.....949.95 v TS450S/AT HF/YK88S1.....979.95 f TS450S/AT HF/3 FILTERS.....1,029.95 m TS520 HF XCVR.....389.95 f TS520S HF XCVR.....399.95 f TS520S HF/NO MANUAL.....389.95 f TS520S HF/CW FLT/MIC.....449.95 m TS570D HF XCVR.....949.95 f TS60S 6M XCVR.....799.95 mv TS680S HF XCVR /160-6M.....789.95 mvf TS680S HF/6M CW/ROUGH.....729.95 m TS680S XCVR/CW FLT.....819.95 mw TS690S HF/C/SMT/UT.....1,299.95 f TS690S HF/6M WAT.....1,199.95 mwv TS690S HF/6M XCVR.....999.95 v TS711A 2M SSB/FM XCVR.....699.95 m TS711A 2M XCVR/TU5.....729.95 w TS711A 2M/TU5/SERV MAN.....759.95 f TS790A 2M/440 XCVR.....1,099.95 wf TS811A UHF ALL MODE.....839.95 mw TS811A UHF XCVR/TONE.....869.95 f TS820S HF/CW FILTER.....469.95 f TS830S HF XCVR.....599.95 f TS830S XCVR /SVC MAN.....619.95 m TS850S HF XCVR.....1,079.95 f TS850S HF XCVR/YK88SN1.....1,099.95 m	TS850S HF/DRU2.....1,139.95 m TS850S HF/THREE FILTERS.....1,159.95 m TS850S/AT HF XCVR.....1,179.95 f TS850S/AT HF/2 FLT/DRU2.....1,319.95 m TS930S HF XCVR/YK88C1.....729.95 m TS930S/AT HF XCVR.....799.95 f TS940S/AT HF XCVR.....1,099.95 mf TW4100A 2m/440 MOBILE.....289.95 f LARSEN NM0150B COIL ONLY.....14.95 m MAHA MHA302 AMP/MHKS2/KEN.....119.95 m MHFN841 BATT PACK.....22.95 w MFJ 1040B PRESELECTION.....69.95 v 109 CIRCLE.....14.95 f 1272MX TNC MIC SWITCH.....29.95 v 1285 SOFTWARE IBM/1229.....12.95 m 1305 5V DC POWER SUPPLY.....9.95 w 249 SWR ANALYZER.....179.95 v 262 1.5K DUMMY LOAD.....39.95 f 288K HEADSET/HT.....19.95 m 422B KEYS COMBO.....99.95 v 5383Y CONTROL CABLE YAE.....29.95 m 624D PHONE PATCH.....64.95 m 722 SSB/DSP/NOTCH FILTER.....59.95 v 784 SUPER SNIP.....169.95 v 9040 40M CW XCVR.....119.95 v 9120B 20M CW PKG.....259.95 v 9130B 30M XCVR STATION.....229.95 m 941E ANT TUNER.....79.95 v 9420X 20M SSB WITH MIC.....183.95 v 9420X 20M XCVR/NO MIC.....175.95 wf 9475X 75M ORP SSB XCVR.....179.95 m 971 200W ANT TUNER.....69.95 f 989B TUNER/NO MANUAL.....239.95 v MIRAGE B33 2M AMP.....89.95 f KP1/2M PREAMP.....109.95 m NGC MH900PK EAR/MIC.....29.95 w OAKBAY LP11P LK FLT/N CON.....49.95 f OPTOELECTRONICS R10 RCVR.....174.95 f SCOUT (MODEL 25).....299.95 f PALOMAR RX100 NOISE BRIDGE.....69.95 v PERIPHERX BP75 13.2V 1200MA.....25.00 w EBP225 12V 800MAH.....26.95 w FNB27 YAESU BATTERY.....19.95 m PB13SM 7.2V 1300MH.....19.95 w PHILLIPS U105 ROTOR.....49.95 f RF CONCEPTS 223 2M AMP.....69.95 f SGC PS30 3400 UNREG PS.....319.95 w 0410 SG2000/POWER XCVR.....1,343.96 w SHURE 526T SERIES II.....89.95 f STANDARD CBT711 AA BATTERY CASE.....16.95 w CMPT115 SPEAKER MIKE.....39.95 v CNB153 7.2V 1A NICAD.....29.95 w CNB171 BATT PACK.....29.95 w CNB401 BATTERY.....4.95 m C108A 2M HT/200MW.....119.95 m C158A 2M HANDHELD.....149.95 f C168A 2M MINI FM HT/PTP.....179.95 mw C178A 2M/440 HT.....249.95 v C178A 2M/440 /CMU161.....269.95 m C508A 2M/440 HT/CASE.....179.95 wf C508A 2M/440 HF/SPK/MIC.....219.95 m C5718DA 2M/440 MOBILE.....499.95 w STARTEK 1350 COUNTER.....119.95 f 15-UHS FREQ CTR/AS-IS.....50.00 m	3500 FREQ COUNTER/AS-IS.....50.00 m UNIDEN BC860XLT SCANNER.....151.95 m US TOWER HDP SERV PLTRM/HDX555.....399.95 m VECTRONICS PM300V METER.....69.95 mw YAESU CA10 CHG SLEEVE.....12.95 w CA14 CHARGING SLEEVES.....21.95 w CSC19 CASE.....15.95 mw CSC29 SOFT CASE.....14.95 w CSC62 CASE.....12.95 wf CSC66 SOFT CASE.....15.95 w CSC67 SOFT CASE.....15.95 w CSC68 CARRYING CASE.....12.95 w EDC5B DC ADAPT/FILTER.....19.95 w FBA15 BATTERY PACK.....15.95 w FBA3 CHARGING SLEEVE.....19.95 w FC10 AUTO TUNER/FT840.....269.95 mf FC757AT AUTO TUNER.....309.95 wf FC757AT ANT TUNER/ET67.....309.95 m FC757AT TUNER/SCUFFED.....299.95 v FL7000 HF AMP/LATE SNF.....1,679.95 f FNB31 1.8V 600 MA.....29.95 mw FNB33 BATT PACK.....24.95 mw FNB41 BATT PACK.....19.95 w FNB42 BATT PACK.....24.95 w FP700 POWER SUPPLY.....179.95 f FP757HD POWER SUPPLY.....219.95 v FG100B SWL RCVR.....439.95 m FRG8800 SWL RCVR.....499.95 mf FTV707 XTR/6M.....189.95 m FT1000 HF XCVR/BPF1/XFD.....2,619.95 v FT1000 HF XCVR.....2,879.95 mw FT211RH 2M XCVR/MIC.....149.95 f FT290RMKII TONE/NO BCKT.....439.95 f FT290RMKII 2M PORT XCVR.....449.95 f FT290RMKII 2M XCVR.....449.95 f FT3000W VTS17A.....369.95 m FT3000M 70W 21M FM XCVR.....314.95 w FT51R 2W 2M/440 HT.....259.95 m FT5100 2M/440 XCVR.....349.95 m FT5200 2M/70CM MOBILE.....399.95 f FT650 10/12/6M XCVR.....1,099.95 m FT690RII 6M XCVR/FB48.....489.95 v FT726R 2M/430/440/50.....849.95 v FT726R /6M/50W/SCUFF.....949.95 m FT726R XCVR/2m + 430/50.....649.95 v FT736R 2M/430 XCVR.....1,199.95 f FT736R 2M/430 XCVR/6M.....1,399.95 f FT747GX HF XCVR/FM-UNIT.....569.95 m FT747GX HF/HEATH SB1400.....499.95 f FT747GX W/MMB38.....554.95 v FT757GX HF XCVR.....669.95 mwfv FT757GX HF/SERV MAN.....679.95 f FT757GX MKII HF XCVR.....719.95 mwfv FT767GX HF XCVR.....1,099.95 mw FT767GX HF XCVR/2M.....1,169.95 mf FT767GX HF XCVR/2M/6M.....1,299.95 f FT767GX HF XCVR/6M.....1,199.95 f FT815 440 HT.....189.95 v FT840 HF XCVR.....599.95 m FT840 XCVR/AM/FM UNIT.....659.95 m FT890AT HF XCVR.....899.95 v FT990DC HF W/SVC MAN.....1,059.95 m LC010 FT50R CASE.....24.95 w MH12A2B SPEAKER/MIC.....29.95 m MH29A2B SPRK MIC.....89.95 m MH31B8 (FOR FT1000MP).....31.95 w MH32A2B SPEAKER MIKE.....24.95 f MMB54 MOBILE MT.....19.95 w NC34B CHARGER.....9.95 m NC38B CHARGER.....9.95 m NC38C CHGR 220/234 VAC.....9.95 m NC50/CA10 CHARGER.....9.95 m SP5 SPRK/LTS PATCH.....199.95 f YF12C 500HZ FILTER.....95.95 f
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DEMOS & RETURNS

Save money on this is New Equipment that has been either Demonstrated, on Display or Returned and Restocked. The cartons are no longer factory sealed, but each has been checked by our Service Department and still has it's New Equipment Warranty in effect. Used Equipment Policies described on the previous page do not apply, but All AES New Equipment policies do apply.

ADI	
AR446 70CM XCVR	269.95 m
AT400HP 440 HT	179.95 f
AEA/TIMEWAVE	
DSP2232 DSP TNC	449.95 f
AC4 POWER SUPPLY	17.95 m
KK1 KEYBOARD KEYS	179.95 m
PK900 TNC	419.95 m
WEFAX256	116.95 v

ALINCO	
DJ1T 300MW 2M HT	71.95 mwf
DJ5T 2M/440 HT	159.95 mf
DJ1T 2M HT	134.95 v
DJ5TH 2M/440 HT /5W	299.95 f
DJ11T 2M HT	79.95 v
DJ10T COMM RCVR	323.95 mv
DR140T 2M XCVR	199.95 m
DR430T 440 XCVR	219.95 m
DX70T HF XCVR	679.95 v
DX70TH HF XCVR	754.95 f
EDC24 BATT CHARGER	19.95 v
EDC34 DESK CHARGER	69.95 v
EME12 HEADSET/VOX	63.95 v
EME16 MIC/EAR	13.95 m
EMSR2 SPKR/MIC	34.95 m
ESC18 CASE(DJ180T)	12.95 m
MB110 BRKT	17.95 v

ALPHA DELTA	
HV PROJECTOR	35.95 v

AMECO	
TPA PREAMP	68.95 v

AMERITRON	
ALS600 SOLID STATE AMP	999.95 f
ARB700 RELAY	24.95 mf
QK5 T/R SWITCH	299.95 m
RCS4 RMT SWITCH	119.95 m
RCS8 SWITCH	125.95 v
AOR	
AR3000A RCVR	989.95 v

ARRL	
215 G6E MORSE SOFT	18.95 v

ASTATIC	
M57M6 HAND MIC	43.95 f

ASTATIC	
TUPPD104SE MIC/YAE	107.95 f

ASTRON	
RS35A POWER SUPPLY	134.95 w

AZDEN	
AZ21 2M HT	179.95 mf

PCS7300H 440 MBLE	269.95 m
PCS7800H NO BCKT	289.95 f
PCS7800H 10M FM	299.95 v
PT101 PTT SWITCH	34.95 m
SXD514W SPK/MIC	44.95 m

B&K	
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2911 METER	29.95 m
B&W	

AC1.8-30 ANTENNA	152.95 v
AS40 40-10 TRAP DIPOLE	139.95 v

BAYGEN	
FP5L LANTERN	62.95 v

BIRD	
25J 950-1260MHZ	129.95 v

CENTAUR	
B41Y1050 BEAM BLN/SCUFF	54.95 m

CES	
SS168 PATCH	199.95 m

410 PERSONAL PATCH	99.95 mv
4700VP PHONE PATCH	149.95 mwf

CHEERKEE	
AH50 6M HT	134.95 mf

AH50SF 6M HT	224.95 v
MA27 MOBILE ADAPTER	40.45 w

COBRA	
COBRA SR11 SCANNER	59.95 f

COMET	
CF360A DPLXR/LEADS	62.95 v

RS2 GUTTER MOUNT	19.95 v
COURIER	

M54 5W W/151.625	179.95 mf
U22A UHF HT	119.95 mf
U22B UHF HT	119.95 m

CONNECT SYSTEMS	
CS800 DPLX PATCH	329.95 f

CUSHCRAFT	
ARX220B 220 ANT	58.95 v

A148SK STACK	39.95 v
LAC4NH ARRESTOR	39.95 v

PS4A REMOTE POL. SW	69.95 m
220SK STACK KIT	59.95 m
26B2 2M ANT	269.95 v

DAIWA	
DP810 DIG RF METER	199.95 f

DIAMOND	
K400CNMO ANT MT	59.95 m

K540 MOUNT	29.95 m
K601M HIDE-TRUNK	62.95 mv

SRH815 ANT/SM/A	39.95 v
SK100 HF-6M MTR	134.95 mf

DIGIMAX	
D500 COUNTER	124.95 f

D510 COUNTER	139.95 f
D612 COUNTER	179.95 m

DRAKE	
R8A RCVR	899.95 mv

SW1 SWL RCVR	224.95 m
SW8 SWL RCVR	719.95 f

GARMIN	
GPS38 GPS RCVR	159.95 f

GENESYS	
CT221KE EARTALK	49.95 m

T05K THROAT/MIC	39.95 m
GROTHE	

VS2 SIREN	69.95 m
GRUNDIG	

MINI WORLD 100	44.95 v
YACHTBOY 230 SWL	71.95 m

YACHTBOY 400 SWL	169.95 mv
HEIL	

CC1K HM10 CABLE/KEN	22.95 v
HS1 HEL HAND SWITCH	18.85 w

PROSET4 BOOM/MIC	118.95 v
HUSTLER	

SSM3 SPRING	19.95 m
HYGAIN	

214S1 2M 14EL/15'	58.95 w
2400-155 BOOM MIC	79.95 v

5146710 MAST ADAP	69.95 m
ICOM	

AH2B BPR MT/WHIP	233.95 v
AT150 100W TUNER	399.95 m

AT160 AUTO TUNER	224.95 m
BC119-11 DESK CHGR	85.95 f

BC79 CHARGER	119.95 v
BP121 7.2V/400MA	34.95 v

BP157 900MA 7.2V	59.95 v
BP195 BATT	34.95 m

BP199 BATT	63.86 w
BP7 13.2V/450MA	69.95 m

BP81 BATTERY	39.95 m
CP12 CIG ADP/NO BOX	29.95 m

CP12L CIG CABLE	32.25 w
CSWHI SOFT W/CABLE	45.95 v

EX627 HF ANT SEL	359.95 m
HM12 SCANNING MIC	67.95 v

HM46 SPK/MIC	39.95 f
HM65 SPK/MIC	66.95 v

HM90A WIRELESS MIC	119.95 v
HM92A MIC	89.95 m

HS1 HEADSET	84.95 m
IC26GXAT 2M 3W HT	189.95 mvf

IC2700H 2M/440 FM	399.95 f
IC281H 2M MBL	269.95 fv

IC706 HF 2M XCVR	899.95 v
IC707 HF XCVR	656.95 v

IC775DSP HF XCVR	3,239.95 m
LC123 CASE/IC21A	27.95 v

LC125 CASE/IC22A	27.95 v
LC128 CASE/CW32A	34.95 v

MB16 HT MOUNT	14.95 m
M10A MARINE HT	159.95 m

R10-05 BLOCKED	449.95 mw
R71A SWL	999.95 wfv

R8500/RS-R8500	1,799.95 v
UT30 ENCODER	49.95 v

ICW32A 2M/440 HT	278.95 v
JPS	

NF60 DSP/NOTCH FILT	99.95 v
NIR-10 FILTER	179.95 m

NTR1 NOISE FILTER	114.95 m
KENWOOD	

AT50 AUTO TUNER	289.95 f
EMC3 MIC/EARPHONE	26.95 v

IF10D INTERFACE	80.95 v
KNB7A 800MA 12V	69.95 m

KQ78 TONE BOARD	44.95 m
KSC14 CHGR	78.95 wf

KSC8A CHGR	21.95 v
MC44DM TTP MIC	69.95 m

MC45DM TTP MIC	35.95 v
MC90 MIC	214.95 m

PB34 5W BATT	79.95 m
PG3B NOISE FLTR	26.95 v

PG3E CIG CORD	19.95 m
PG3J CIG CORD	59.95 m

PS40 POWER SUPPLY	179.95 mf
PS52 POWER SUPPLY	239.95 v

PS53 HD POWER SUPPLY	224.95 w
SC41 CASE	21.95 v

SMC34 SPKR MIC	35.95 mv
THG71A 2M/440 HT	309.95 v

TH22ATH 2M HT	224.95 m
TH235AH 2M SW	179.95 m

TH79AH 2M/440 HT	341.95 w
TM251A 2M /440 RX	299.95 m

TS570D HF XCVR	1,249.95 v
TS790A 2M/440 HT	1,259.95 v

TS950SDX HF XCVR	3,499.95 f
TU7 TONE BOARD	49.95 m

YK88CN1 CW FLTR	114.95 m
KLM	

CS2 CIR SWITCH	39.95 m
2M14C 2M BEAM	159.95 m

LARSEN	
KD427/70 DUAL DUCK	24.95 v

NMOTLP TRUNK LD MT	23.95 v
NM0150LTM 2M ANT	45.95 v

NM02270SH 2M/440 1/4 WV	29.95 v
MAGELLAN	

GPS2000 GPS RCVR	129.95 m
MAHA	

MHA301 DOCK BOOSTER	104.95 m
MHBP132 BATTERY	49.95 m

MHBP180 BATTERY	44.95 v
MHBP8H 8.4/1.8 NIHM	59.95 m

MHC777 DESK CHARGER	44.95 mvf
MHFN12 12/900 NIHM	49.95 m

MHPB17 12/900 NIHM	62.95 f
MH101Y2 CHGR	59.95 m

MH24A CHARGER	10.95 w
MAXON	

MX49FX 49 MCHZ XCVR	44.95 mf
MX49HX 5CH 49MHZ	44.95 mv

PC50 40MHZ HT	44.95 m
49SX/B 49MHX HT	24.95 m

MFJ	
1020B ACT RX ANT	62.95 mv

1025 NOISE CMC ANT	98.95 v
114 LARGE LED CLOCK	29.95 m

1214PC INTERFACE	114.95 m
1225 RECEIVE ONLY INTERFACE	59.95 f

1270C TNC	99.95 m
1272B TNC/MIC SWITCH	35.95 mv

1272MX TNC/MIC SW	35.95 f
1272MYH TNC/MIC SW	35.95 v

1278B TNC/FACTOR	249.95 f
1278B/DSP TNC	314.95 m

1289 MULTICOM	24.95 m
1289M 3 1/2 IBM	53.95 v

292K EAR/MIC KENWOOD	15.95 v
407C KEYS	59.95 m

4114 POWER PACK	58.95 fv
447 SLIMLINE KEYS	71.95 v

452 KEYBOARD KEYS	107.95 m
492 MEMORY KEYS	79.95 v

5080MYV TNC CABLE /FT2500	12.95 m
5084 TNC/ICO 8P	13.95 m

564 IAMBIC PADDLE	44.95 v
6413 CHGR	44.95 m

641K CHGR/KENWOOD	44.95 v
78 REMOTE FOR MFJ492	17.95 v

784B DSP FILTER	209.95 m
8100W S/W RCVR	71.95 w

912 REMOTE BALUN	44.95 f
914 AUTO TUNER EXT	49.95 wf

9140B 40M XCVR	296.95 w
921 VHF TUNER	62.95 v

924 440HZ TUNER	62.95 v
9420X 20M XCVR	199.95 m

971 PORTABLE TUNER	89.95 v
MIDLAND	

75510 FRS RADIO	89.95 mvf
5510 FRS/BROKEN CLIP	79.95 m

MIRAGE	
B1030G 2M 300W AMP	549.95 m

B2156 150W 2M	299.95 mf
B23 AMP /REFURB	89.95 f

B23G 2M /230W AMP	119.95 fv
B34G AMP	79.95 f

C1012G 220MHZ AMP	269.95 w
C2512G 220 AMP	259.95 m

D1010ATVN AMP	529.95 m
KP1/10M PREAMP	99.95 m

CONSUMER PRICE LIST

ALINCO (ALI)	Reg	Sale
DI-546 Family radio svc handheld/batt/cgr +	\$149.95	119 ⁹⁵
COBRA (COB)		
CP-912 900MHz dig sp spec cordless	Δmf \$369.95	169 ⁹⁵
UNIDEN (UNI)		
CT-301 Cordless phone	Dm \$69.95	29 ⁹⁵
DX-3555 25 ch scrambled dual pad	Dmwf 159.95	69 ⁹⁵
EXP-9100 900MHz digital spread spec	Dm 459.95	189 ⁹⁵
KC-3510 25 ch cordless phone	Df 109.95	39 ⁹⁵

CHEROKEE (CHR)		
AH-27 Handheld CB	\$169.95	119 ⁹⁵
AH-100 SSB/AM handheld CB	399.95	279 ⁹⁵
CBS-1000 SSB/AM Base CB	449.95	299 ⁹⁵

COBRA (COB)		
10 Ultra AT AM Mobile CB w/magnet mt ant	\$79.95	59 ⁹⁵
18 Ultra AM Mobile CB	Dwfv 99.95	59 ⁹⁵
18WX ST Sound Tracker AM Mobile CB w/WX	109.95	79 ⁹⁵
19DX II AM Mobile CB	69.95	49 ⁹⁵
19LTD II AM Mobile CB	Dv 79.95	49 ⁹⁵
19 Ultra II AM Mobile CB	69.95	49 ⁹⁵
21LTD ST Sound Tracker AM Mobile CB	119.95	99 ⁹⁵
21LTD WX AM Mobile CB w/WX	Dfv 119.95	79 ⁹⁵
25LTD (25 Classic) AM Mobile	Dv 139.95	99 ⁹⁵
25LTD ST Sound Tracker AM Mobile CB	149.95	119 ⁹⁵
25LTD WX AM Mobile CB w/WX	Dfv 169.95	109 ⁹⁵
25WX ST Sound Tracker AM Mobile CB w/WX	179.95	129 ⁹⁵
29LTD (29 Classic) AM Mobile CB	Dmfv 179.95	129 ⁹⁵
29LTD ST Sound Tracker AM Mobile CB	189.95	149 ⁹⁵
29WX ST Sound Tracker AM Mobile CB w/WX	209.95	159 ⁹⁵
93LTD WX AM Base CB/WX/tone alert Dmfv	189.95	99 ⁹⁵
1486LTX ST Sound Tracker SSB/AM Mobile CB	289.95	199 ⁹⁵
20106LTX WX SSB/AM Base CB w/WX	Dfv 539.95	349 ⁹⁵
HH-35 AM portable CB Xcvr	Dmfv 89.95	49 ⁹⁵
HH-36ST Sound Tracker handheld CB	89.95	69 ⁹⁵
AT-60 Trunk lip/roof mt CB antenna	Dmwf 19.95	14 ⁹⁵
AT-70 Magnet mt CB antenna	24.95	
FRS-200 Family radio service handheld	159.95	99 ⁹⁵

ICOM (ICO)		
IC-4008A Family radio svc handheld	\$160.00	119 ⁹⁵
KENWOOD (KEN)		
UBZ-LF14 Family radio svc black handheld ..	\$149.95	119 ⁹⁵

EMC-3 Label clip mic/ear piece	29.95	
HMC-3 VOX/boom mic headset	59.95	
SMC-34 Spkr/mic/vol cont/function keys ..	39.95	
USC-4B Black nylon case	15.95	

MIDLAND (MID)		
75-510 Family radio shandheld/batt/cgr	† \$199.95	99 ⁹⁵
22-410 Speaker/mic for 75-510	34.95	
22-430 Throat mic/ear/PTT box; 75-510 ..	69.95	

UNIDEN (UNI)		
PC-66XL AM Mobile CB	\$129.95	89 ⁹⁵
PC-76XL AM Mobile CB	179.95	109 ⁹⁵
PC-76XLW AM Mobile CB w/WX alert	189.95	129 ⁹⁵
PRO-340XL 40 ch port CB/rubber ant Dmfv	89.95	59 ⁹⁵
PRO-350XL 40 ch handheld CB radio	169.95	99 ⁹⁵
PRO-501XL AM Mobile CB	49.95	39 ⁹⁵
PRO-510XL AM Mobile CB	69.95	44 ⁹⁵
PRO-510AXL AM Mobile CB w/mag mt ant ..	69.95	49 ⁹⁵
PRO-520XL AM Mobile CB	89.95	59 ⁹⁵
PRO-538W AM Mobile CB w/WX	109.95	74 ⁹⁵
PC-122XL SSB/AM Mobile CB	199.95	129 ⁹⁵
Grant-XL SSB/AM Mobile CB	259.95	169 ⁹⁵
Washington SSB/AM Base CB	349.95	249 ⁹⁵
ESP-26 External speaker	16.95	

YAESU (YAE)		
VXF-10 Family radio service handheld w/WX	\$159.00	119 ⁹⁵
CLIP-8 Belt clip for VXF-1	Δmf 8.95	4 ⁹⁵
EDC-15 DC adapter	38.95	
FEP-10 Earphone	9.95	
FNB-53 Nicad battery pack	19.95	
MH-34B4B Earpiece/mic	30.95	
MH-374B Earpiece/mic	30.95	
NC-66B Wall charger for FNB-53	18.95	

AOR (AOR)		
AR-3000A 1-2036MHz dtx w/SSB/cell blkd ..	1329.95	1099 ⁹⁵
MM-1 Mobile mounting bracket; AR-3000A ..	19.95	
AR-5000 01-2600MHz scan/cell blkd/spec ord	2199.95	1799 ⁹⁵
AR-7000B 1.1KHz-2GHz/cell blocked	m 1459.95	1149 ⁹⁵
SAC-8000 Opt Scout/AR8000 connect kit Dmf	14.95	
SC-8000 Soft case for AR-8000B	Δmw 12.95	

AOR - continued	Reg	Sale
AR-8200B .5-2040MHz hand/SSB/cell blkd ..	799.95	549 ⁹⁵
SC-8200 Soft case for AR-8200B	12.95	

BMI (BMI)		
Bitlogger II Auto recorder activator	\$69.95	
RC-1A Impedance matching patch cord	19.95	

GROTHE (GRO)		
VS-2 Emergency vehicle siren	\$99.00	89 ⁹⁵
VS-2L/A Window mt siren/amber light	249.95	
VS-2L/B Window mt siren/blue light	249.95	
VS-2L/R Window mt siren/red light	249.95	
VS-2LS/A Window mt siren/amber strobe ..	299.95	
VS-2LS/B Window mt siren/blue strobe ..	299.95	
VS-2LS/R Window mt siren/red strobe	299.95	
VS-3 Volunteer vehicle PA/horn w/spkr	159.00	129 ⁹⁵
V-4 P/A emergency vehicle siren w/spkr ..	169.00	139 ⁹⁵

CHANNEL MASTER (CHA)		
5095A Base mon ant/5' trimast/50' cbl Dmfv	\$59.95	49 ⁹⁵

MAXON (MAX)		
WX-70 Weather monitor/alert w/ps	\$49.95	39 ⁹⁵
MIDLAND (MID)		
74-109 Weather/hazard radio/alert w/ps ..	\$59.95	39 ⁹⁵

Monitor America (MON)		
Monitor America Scanner frequency book ..	\$29.95	

OREGON SCIENTIFIC (ORE)		
WR-3300 Weather/hazard radio/alert w/ps ..	\$59.95	49 ⁹⁵
WR-8800 Port WX/hazard radio/alert w/ps ..	79.95	59 ⁹⁵

SONY (SON)		
ICF-SC1 300 ch pocket scanner	\$329.95	269 ⁹⁵
ICF-SC1PC 300ch pock scanner/PC interface	429.95	349 ⁹⁵
ACE-606H 6vdc 400ma AC adapter	22.99	
DCC-E260 Mobile DC adapter	19.99	

UNIDEN BEARCAT (UNI)		
BCT-2 Pre-prog warning scan/AC ps	Df \$239.50	99 ⁹⁵
BCT-10 Pre-prog hiway info sys scan	Dmfv 369.99	129 ⁹⁵
BC-147XLT-1 16 ch prog scanner/instant WX	169.95	99 ⁹⁵
BC-148XLT-1 20 ch prog scanner/WX alert ..	179.95	99 ⁹⁵
BC-178XLT 100 ch prog scan/air/WX alert ..	229.95	139 ⁹⁵
BC-350A 50 ch prog/service search w/AC ps	199.95	119 ⁹⁵
BCT-7 Pre-prog warning scan/air/800/AC ps	319.95	179 ⁹⁵
BCT-12 Pre-prog mobile warning scanner ..	349.99	179 ⁹⁵
BC-700A 50 ch prog/svc search/800/AC ps ..	299.95	169 ⁹⁵
BC-760XLT 100 ch prog/svc search/800/AC ps	369.95	219 ⁹⁵
BC-002 CTCSS tone board; BC-760XLT	51.95	
BC-003 Switch box for BC-002	10.95	
BC-004 RF preamp for BC-700XLT	27.95	
BC-860XLT 100 ch prog scanner/air/800	319.95	189 ⁹⁵
BC-895XLT 300 ch prog scanner/trunking ..	499.95	219 ⁹⁵
BC-9000XLT 500 ch 25MHz-1.3GHz	699.95	429 ⁹⁵
BC-005 CTCSS tone board; 8500/9000XLT ..	37.95	
BC-60XLT-1 30ch prog pocket; use AA batts ..	169.95	99 ⁹⁵
PS-001 DC power cord	8.95	
BC-80XLT 50 ch prog pocket scanner/800 ..	249.95	149 ⁹⁵
AD-100 AC adapter/batt cgr; earlier scanners	16.95	
AD-140 Extra charger; BC-100XLT/200XLT ..	13.95	
BP-70 Extra battery for BC-70XLT	27.95	
BP-200 Extra battery; BC-200XLT	26.95	
BP-205 Extra battery; BC-100XLT	26.95	
BC-120XLT 100 ch prog pocket w/aircraft ..	249.95	149 ⁹⁵
BC-230XLT 200ch prog pock/air/800/extra batt	459.95	199 ⁹⁵
SC-150B 100 ch black sport pocket/800	299.95	179 ⁹⁵
AD-70 Extra charger	10.95	
BP-120 Extra battery	18.95	
LC-120 Carrying case; BC120XLT/230XLT ..	19.95	
LC-150B Carrying case for SC-150B	19.95	
(KOS) QZ/99 Noise reduction headphones ..	59.99	
UA-502 Cig power cord	11.95	
BC-235XLT 300ch prog pock/trunk/extra batt	499.95	219 ⁹⁵
BP-180 Extra battery	16.95	
LC-120 Carrying case	19.95	
BC-3000XLT 400 ch 25MHz-1.3GHz pocket ..	699.95	399 ⁹⁵
BP-2500 Extra batt; BC2500/3000	63.95	
LC-2500 Carrying case; BC-2500/3000XLT ..	20.95	
NPD-001 National frequency book	14.95	9 ⁹⁵
RFD-001 IN/LK/JOH/M/VI freq book	14.95	

COURIER (COU)		
Procom 2w VHF FM hand-held/batt/cgr	Δm \$199.95	99 ⁹⁵
AUC-12 Cig lighter charger adapter	Δw 12.00	4 ⁹⁵
M-54 5w 4ch VHF hand-held/batt/cgr/151.625	299.95	199 ⁹⁵
M-510 5w 10ch synth VHF FM hand-held	399.95	269 ⁹⁵

COURIER - continued	Reg	Sale
MU-510 5w 10ch synth UHF FM hand-held ..	439.95	299 ⁹⁵
CCK-510 Cloning cable for M-510/MU-510	18.95	

ICOM (ICO)		
IC-F10-1 2w 146-174MHz 24 ch HT	Dm \$495.00	289 ⁹⁵
IC-F20-2 2w 440-470MHz 24 ch HT	Dm 559.00	329 ⁹⁵
BM-113U Trickle charger; F10/F20	Δm 26.00	19 ⁹⁵
EX-1690 PC prog software; F10/F20	Δm 40.00	29 ⁹⁵
A-22 5w PEP compact Navicom air handheld	720.00	549 ⁹⁵

MAXON (MAX)		
MX-49FX 5 ch 49 MHz ear mic Xcvr	\$89.95	49 ⁹⁵
MX-49HX 5 ch 49 MHz boom mic/headset Xcvr	89.95	49 ⁹⁵
MX-49SX 49 MHz boom mic/headset Xcvr ..	49.95	29 ⁹⁵
PC-50 5ch 49MHz hand-held/PTT/VOX headset	79.95	49 ⁹⁵
FRS-114 FRS handheld	Δmf 119.95	69 ⁹⁵
DV-7510 Wall charger; FRS-114	Δmf 10.95	
WTA-9F Ear speaker; FRS-114	Δmf 6.95	3 ⁹⁵

RANGER (RAN)		
LC-1000 Leather case	Δmf \$24.95	14 ⁹⁵
SRA-106A Speaker/mic	Δmf 44.95	24 ⁹⁵
SRA-107 Speaker/mic	Δmw 44.95	29 ⁹⁵

ICOM (ICO)		
IC-M3A 5w marine handheld w/AA nicads	\$300.00	189 ⁹⁵
IC-M45W White 25w VHF marine Xcvr	319.00	199 ⁹⁵
M-710 (04) 150w HF marine SSB	spec order 2100.00	1399 ⁹⁵
M-105 150w 1.6-27.5MHz SSB	spec order 2400.00	1599 ⁹⁵
AT-130 HF marine auto ant tuner spec order	735.00	499 ⁹⁵

KENWOOD (KEN)		
TKM-707 150w HF marine SSB Xcvr spec order	2249.95	1249 ⁹⁵
KAT-1 HF marine auto ant tuner	spec order 999.95	569 ⁹⁵

RANGER (RAN)		
RCI-6060 25w VHF marine Xcvr/scan	Df \$279.00	129 ⁹⁵
RCI-8000 5w VHF marine handheld	Dwf 279.00	129 ⁹⁵

UNIDEN (UNI)		
MC-535 25w 90 ch VHF marine Xcvr	\$199.99	119 ⁹⁵
MC-1010 25w VHF marine Xcvr	299.99	139 ⁹⁵
MC-1020 25w VHF marine Xcvr	319.99	139 ⁹⁵
HH-940 1w VHF marine hand-held	309.99	159 ⁹⁵
HH-955 5w VHF marine hand-held	199.99	129 ⁹⁵
SH-950 5w 90 ch deluxe marine hand-held ..	399.99	199 ⁹⁵

SHAKESPEARE (SHA)		
396-1 3 db, 5' antenna, less mount	\$107.50	59 ⁹⁵
497 6 db, 8' antenna, less mount	89.50	49 ⁹⁵
5202 6 db ant w/chrome ferrule, less mt	133.95	69 ⁹⁵
5206-C Economy 8' ant w/chrome ferrule, no mt	56.95	39 ⁹⁵
366H Chrome zamac ratchet mount	37.95	29 ⁹⁵
495 White plastic lift & lay mount	23.50	16 ⁹⁵
420 3 db, 5' ant w/fold-down mount	98.50	59 ⁹⁵
5204-8 Combo CB/VHF marine 8' ant	Δmf 192.50	59 ⁹⁵

AES 12vdc ACCESSORIES (AES)		
SB-115 AC-DC 5A converter	Δmf \$39.95	19 ⁹⁵
SB-151 300w DC to AC inverter	Δfv 79.95	39 ⁹⁵
SC-146 Double socket lighter plug	Δmf 12.95	4 ⁹⁵
SC-192 Multi-purp 4-in-1 12v light	Δmf 19.95	9 ⁹⁵
SC-193 12v turbo-vac	Δmf 19.95	9 ⁹⁵
SC-199 Compact cordless spot/yellow	Δmf 29.95	19 ⁹⁵
SC-784 Quartz hal spot, 400K candle	Δmw 19.95	12 ⁹⁵
SC-812 Floor work light/upright stand	Δmf 12.95	6 ⁹⁵

X-10 Home Automation/Security (X10)		
CK-11A X-10 ActiveHome automation/win soft	† \$119.99	89 ⁹⁵
DS-7000 7-piece home security system	269.99	199 ⁹⁵
PK-9 REX-10 barking dog alarm	† 79.99	59 ⁹⁵
DM-10A Motion detector for REX-10	† 34.99	25 ⁹⁵
AM-466 3-pin grounded appliance module ..	† 16.99	13 ⁹⁵
AM-486 2-pin polarized appliance module ..	† 15.99	12 ⁹⁵
DS-10A Long range door/window sensor	† 31.99	22 ⁹⁵
DW-534 Door/window sensor	† 21.99	15 ⁹⁵
KF-574 Key fob security remote control	† 26.99	19 ⁹⁵
LM-465 Lamp module	† 15.99	12 ⁹⁵
MC-460 6 function 8 unit mini controller ..	† 15.99	9 ⁹⁵
PH-508 Remote 110 db siren	† 59.99	36 ⁹⁵
PR-511 2 floodlight motion detect/rem light	† 64.99	47 ⁹⁵
RW-694 4 unit wireless wall switch	† 21.99	12 ⁹⁵
RW-724 3 unit-dimmer wirels wall switch ..	† 19.99	12 ⁹⁵
RW-6900 Wireless wall switch set	† 31.99	19 ⁹⁵
SC-503 6 function 16 unit maxi controller ..	† 29.99	19 ⁹⁵
SH-10A Indoor 90 db remote alarm siren	† 31.99	22 ⁹⁵
SP-554A Wireless motion detector	† 59.99	44 ⁹⁵
SR-227 Wall receptacle mod/custom plate ..	† 21.99	16 ⁹⁵
TH-280T Thermostat set-back controller	† 21.99	15 ⁹⁵
WS-467 Wall switch module	† 15.99	12 ⁹⁵

MFJ MFJ ENTERPRISES, INC.

105C 24 Hour Quartz Wall Clock Handsome black, 10" dia. face, sweep second hand. Uses one "A" battery, not incl. **\$19⁹⁵**



112 Dx'ers World Map Clock and Calendar
Adds a touch of class to your ham shack! Features pushbutton selection to highlight and show the Month, Day and 12/24 hour Local Time in 25 key world cities. Large 1 1/2" LCD readout, alarm function. One-second per day accuracy. Tilt bracket. Lithium battery backup. 5 1/2" w x 3 1/2" h x 3/4" d **\$24⁹⁵**

114 Giant LED 24/12 hour clock

Has four HUGE 2.3" high digits. The 12 or 24-hour display format is visible 50 ft. away or more! Operates from 110VAC with battery back-up feature. 6 1/2" h x 13 1/2" w x 1" d **\$39⁹⁵**



118 Jumbo LCD™

24/12-hour clock
1.25" h - high contrast LCD digits. Shows year, month, date and day in four different languages. 100 year calendar, flip stand. Uses one "AAA" battery. 5 1/2" h x 3 1/2" w x 1/2" d **\$24⁹⁵**



Small 24-hour Clocks: A Dual Clock with separate UTC and local time displays, and a Single Clock with 24 hour time only. Heavy brushed aluminum frame, 5/8" high LCD numerals, sloped face. Flashing seconds colon, battery included.

107B Single Clock, 2 1/2" w x 1" h x 2" d **\$9⁹⁵**
108B Dual Clock, 4 1/2" w x 1" h x 2" d **\$19⁹⁵**



116 24/12 Hour LED Clock
Switchable 24 or 12 hour display. Large, red 5/8" LED digits. 10 minute ID timer, loud alarm. Operates from 110VAC with battery back-up. Compact, 4 1/2" w x 2" h x 4" d **\$14⁹⁵**

New Clocks from MFJ...



MFJ-152 ThermometerClock™

At a glance you can tell the outdoor & indoor temperature and time. Huge 3/4-inch LCD multiple display shows a 12/24 hour time format and Celsius or Fahrenheit temperatures. Automatic daily update of the minimum & maximum temperature readings and a memory function that recalls the maximum & minimum temperature readings during a period you select. Handsome, tough molded plastic, attractive mounted on the wall or displayed on your desk. Comes with outdoor sensor, sensor mount and 10 ft. of wire. 5" h x 2 3/4" w x 3/4" d. "AA" batteries are included. **\$24⁹⁵**



MFJ-119 GIANTdisplay™
12/24 Hour Calendar/Clock

Size is 8-1/2 x 9 inches making it easily visible from 15 to 20 feet away. The digital display shows: 12 or 24 hour clock format; digital calendar (year, month, date, day), and Celsius or Fahrenheit temperatures. While & silver speckled - attractive for Ham shack, office, police, fire, etc. "AAA" batteries included **\$49⁹⁵**



CSI interconnects provide a fully automatic interface between your FM base radio and phone line so that you can initiate and receive phone calls in your mobile or on your HT without assistance.

The CS-800 & CS-900 below each contains powerful microprocessor controlled features such as:

- 90 Memory Speed Dialer • Last Number Redial • Built-in Programming Keyboard & Digital readout • Remote Base Mode • Regenerated Tone or Pulse Dialout • CW ID • Toll Restrict numbers & sequences... and More!



CS-800 Full Duplex Interconnect

Operates Full or Semi-duplex and also has a built-in Repeater Controller. Simply connects to transceiver mic and speaker jacks. FCC & DOC approved. 12-15 VDC. 7 1/4" w x 7 1/2" d x 2" h, 2 1/2 lbs. **\$359⁹⁵**



CS-900 Control Station Simplex Interconnect

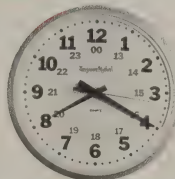
For use w/any simplex transcvr. Also use thru remotely located repeaters (from base) for added range. Digital voice delay standard. Connects to mic & spkr jacks of simplex transcvr. FCC & DOC approved. (Transcvr switching speed does not affect performance) 12-15VDC 7.9" w x 7.5" d x 2" h, 2 1/2 lbs **\$359⁹⁵**

POPULAR CLOCKS



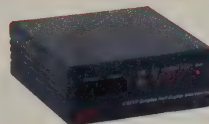
972A (left) Battery operated 12-hour time quartz controlled clock with sweep-second hand. Huge 12" dial allows excellent visibility in large rooms. Black textured case and clear glass crystal. Uses one "AA" battery. 14" diameter x 1 1/4" deep **\$28⁹⁵**

973A (right) as above, but 24-hour version **\$49⁹⁵**



972AD

14" diameter, 12 and 24 hour format wall clock, sweep-second hand. Uses one "AA" battery **\$32⁹⁵**



CES
WIRELESS TECHNOLOGIES

7400VP Telephone Interconnect SPECIAL - \$169⁹⁵

- The Most Versatile Simplex or Half Duplex Patch
- True DTMF Regeneration
- 25 Speed Dial Locations
- Full Remote "Over-the-Air" Programming
- Local programming
- VERATEC Smart Sampling VOX enhanced Protocol or Simple VOX Control
- Automatic Setup • CW-ID
- Automatic Last Number Redial • Hook Flash
- User Programmable ID Code
- Comprehensive Toll Restrict with Override Code • Call Limit Timer • Courtesy Beep
- Time Out Timer/Beeps
- Reverse Patch Ring
- Repeat Audio
- Busy Channel Inhibit
- CTCSS Logic Input
- Connect/Disconnect Control
- Tone Dialing/Multi-Country Pulse Dialing
- Extremely Compact and Rugged Construction (1.5 x 4 x 4 inches)



SDI-50 Automatic Simplex Interconnect Gives telephone access to handhelds & mobiles. Remotely programmable from any DTMF phone. Converts base stations to remote station accessible from any phone. VOX-enhanced sampling. Automatic CW ID. Interface cables incl. 14 1/4" w x 8 1/4" d x 1 1/4" h, 3 1/2 lbs. **\$469⁹⁵**

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AMATEUR ELECTRONIC SUPPLY
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We have Gift Certificates and a selection of over 5,000 major items and accessories to choose from. Certificates may be purchased from our Milwaukee store by calling:

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ICOM See Price List for complete list of ICOM accessories.



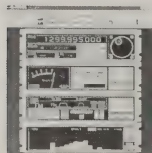
R-8500
Super Wide Band All Mode Comm. Receiver Covers 0.1 to 2000 MHz (cellular blocked) with 10Hz resolution. All modes, AM, FM, WFM, LSB, CW and optional TV-R7100 TV/FM adapter (view TV broadcasts when connected to CRT monitor). Dual VFOs and direct keyboard entry. Versatile scanning functions. and 1000 tunable multi-function memories; 20 banks of 40 channels plus an auto write area of 100 channels and a skip area of 100 channels. In addition, 20 scan edge memory channels store 10 sets of frequencies for programmed scan plus 1 priority, RIT, notch, selectable AGC, noise blanker, tone, squelch, recording jack. Selectivity: 500 Hz, 2.3, 6 and 15 kHz. RS-232C interface, optional wireless remote controller and voice synthesized readout board. 110/220V AC; optional 12V kit. 11 3/4" w x 4 3/4" h x 10 3/4" d, 16 1/2 lbs **See Price List**

R-100-11 Mobile Desktop Scanner

Covers 100kHz to 799 MHz and 900 to 1856 MHz. Cellular blocked. AM, FM wide and narrow modes; Direct keypad entry or selectable step knob tuning. Seven scanning modes. 121 memories: 100 for frequency, mode, attenuator and preamp settings; 20 scan edge for ten pair of ranges for programmed scan and one priority. Convenient 24-hour clock & timer. Telescoping antenna plus 3 external antenna inputs provided. DC cord & mobile mount incl. 13.8VDC @ 1A. **See Price List**



R-10-05 General Coverage Pocket Scanning Receiver Covers 500kHz to 1300MHz (cellular blocked). AM, SSB, FM wide or FM narrow modes. Programmable tuning steps. On-screen spectrum display, 1000 non-volatile memory channels arranged in 18 banks of 50 channels. Scan by bank, mode, or program. Alpha-numeric characters can be entered to identify channels and banks. Noise blanker and automatic noise limiter. Auto frequency control (AFC) and more! Easy-to-read edge-lit LCD display, 24-hour clock with timer, adjustable LCD contrast, signal indicator, power-saver function. Uses Ni-Cd, alkaline or other DC source. Ni-Cds and wall charger included. 2.3" w x 5.1" h x 1.2" d. **See Price List**



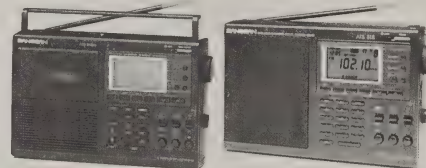
ICOM IC-PCR1000 Communications Receiver for Computer Turn your PC into a world-wide communications receiver. Connect the IC-PCR1000 to your laptop or desktop IBM compatible computer for reception of a wide range of radio frequencies. Listen to favorite stations in the background while running other apps. 100% PC hardware external, IBM PC compatible. Everything you need to connect to your computer is included: Power supply, Built-in speaker, Antenna, RS-232 cable & software **See Price List**

Frequency coverage
0.1/1000-823.999999 MHz*
845.000001-858.999999 MHz
894.000001-1300.000 MHz
*Guaranteed 0.5-1300 MHz only
Modes WFM, FM, AM, SSB, CW
of Memory Channels: 1000/File
Requires
• IBM® PC compatible computer
• Windows® version 3.1 or 95

- Intel 486DX4 or better (Pentium® 100MHz or better recommended)
- At least 10MB of HD free space
- At least 10MB of RAM
- FD drive, RS-232C (38400 bps or faster) serial interface
- Display with 640 x 480 pixel resolution or greater
- Cell-blocked

SANGEAN

ATS-303 PLL synthesized. 13 bands, covers 2.3 to 7.3 & 9.5 to 26.10MHz. AM, FM; FM stereo with headphones. Selectable continuous tuning across frequency range and/or shortwave band. Time & frequency display, auto or manual station search, 20 station memories. Large LCD display, tuning LED. Clock with radio or buzzer alarm & adjustable sleep timer. MW 9K/10K switch for overseas. Low battery icon. Requires 4 "AA" batteries or ext. 6V DC. 6 1/2" w x 4 3/4" h x 1 3/4" d, 15 oz **\$89⁹⁵**



SR-77 Miniature AM/FM & FM Stereo Portable Receiver with Deep Bass Boost feature. Uses single "AAA" battery. Only 3" w x 1 1/2" h x 3/4" d. No speaker, comes with Stereo earphones..... **\$34⁹⁵**



ATS-818CS (left) World Band Receiver with Programmable Cassette Recorder 16 bands, continuous coverage 50kHz-30MHz. AM/SSB/CW/FM modes; stereo via headphones, 45 memory presets. Tuning methods: Direct input, auto or manual scan, memory recall, rotary dial. AM wide or narrow filter, tone and RF gain controls, signal strength and battery indicator. Programmable cassette recorder, play and record LED indicator, auto-stop feature. Clock with dual time display, alarm and sleep timer. Uses seven "AA" batteries (not included). Includes AC adapter and external antenna adapter. 11 1/2" w x 7 3/4" h x 2 3/4" d, 5 lbs **\$229⁹⁵**

ATS-818 (right) World Band Receiver All features of the ATS-818CS, except cassette recorder..... **\$179⁹⁵**

ATS-909 FM-Stereo/MW/LW/SW PLL Synthesized Receiver Five tuning methods: Direct Frequency, Autoscan, Manual, Memory Recall and Rotary, 307 memories. Stereo via earphones, SSB reception. MW 9K/10k switch. AM Wide/Narrow filter and FM mono/stereo selector. Dual time with three times and sleep timer. Clock feature displays 42 world city times. RF gain/tone controls. Lock switch, recorder output jacks, battery and signal strength indicator. Uses four "AA" batteries or 6V DC; AC adapter included. 8 1/2" w x 5 3/4" h x 1 3/4" d, 1.9 lbs **\$279⁹⁵**

ATS-606A Compact Digital All Band World Receiver Continuous ALL BAND coverage 153kHz to 30MHz. AM/FM (FM stereo with earphones). 54 memories, manual or keypad tuning, 1kHz/step fine tuning, scanning, LCD display. Dual time clock and sleep timer. 5 1/2" w x 3 3/4" h x 1 1/4" d **\$169⁹⁵**

DT-200V Broadcast & TV Band Receiver (left) • Fits in shirt pocket or clips to belt. Covers AM and FM broadcast bands (FM stereo via headphone), plus the audio portion of TV channels 2 to 13. LCD display, up and down tuning buttons, auto-scan, 19 memories, automatic shut-off, built-in speaker. Belt clip and stereo earphones included. Uses two "AA" batteries. 4 3/4" h x 2 1/2" w x 1 1/4" d, 5 oz **\$79⁹⁵**



ATS-404 Full Performance, Full Features Digital, AM/FM Stereo Shortwave Receiver CONTINUOUS COVERAGE – tunes continuously all shortwave bands and any frequency in between. AM reception with 9K/10 switch, FM plus FM stereo with earphones. Keypad entry and auto/manual search buttons, 45 memory presets, auto memory scan. Illuminated LCD display, tone control, lockswitch. Dual time (12/24 hour) clock and adjustable sleep timer with new Human Wake System. Carrying case and stereo earbuds included. Uses four "AA" batteries 6 1/2" w x 4 3/4" h x 1 3/4" d **\$99⁹⁵**



GRUNDIG

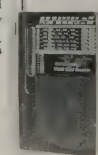
YACHT BOY 400PE Covers 1.6 to 30MHz, all SW bands, FM broadcast band (stereo with earphones), AM and long wave broadcast bands. Direct keypad frequency entry or scan tuning with 40 memories. SSB reception with fine tuning control, high-low tone switch. Tilt stand, telescoping antenna. Multi-function backlit LCD display shows dual zone 24 hour time, frequency, band and signal strength. Dual selectivity. Automatic turn-on and sleep timer. Includes stereo earphones, external reel-up antenna for shortwave. Includes carrying pouch and AC adapter. Requires (6) "AA" batteries 4 3/4" h x 7 3/4" w x 1 3/4" d, 1 1/2 lb **\$189⁹⁵**



TRAVELLER II Covers AM/FM broadcast and the 19, 25, 31, 41, 49 meter shortwave bands. Multi-function LCD display, pushbutton and slide controls, tuning indicator. Clock with travel alarm and World Time selection switch; select a city and read the time! Built-in telescoping and ferrite antennas. 2" speaker, jacks for earphones. Uses (3) "AA" batteries (included). 5 1/2" w x 3 3/4" h x 1 3/4" d **\$69⁹⁵**

TRAVELLER III Digital Covers AM and FM broadcast bands with FM stereo via headphones, and 13 shortwave bands. LCD display, direct entry tuning, 20 preset memories. Quartz alarm clock, AC adapter supplied. Requires (3) "AA" batteries. 5 1/2" w x 3 3/4" h x 1 3/4" d **\$119⁹⁵**

Mini-World 100 World Band Pocket Radio (right) Puts the world in your pocket! Covers AM/FM and 6 shortwave bands. Built-in speaker, telescoping and ferrite bar antennas, LED indicator. Includes earphones and belt clip. Uses two "AA" batteries. Only 4" h x 2 1/2" w x 3/4" d **\$49⁹⁵**



DRAKE

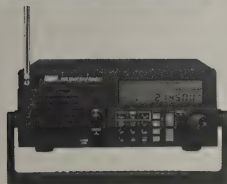
R-8B Communications Receiver • Covers 10kHz–30MHz & 35–55MHz with the optional VHF converter. Alpha-numeric display, kHz & MHz modes; dual VFOs; 1000 memories; multi-function scanning; AM/FM RTTY/CW/LSB/USB modes; 5 voice bandwidth filters. Built-in receive preamp/attenuator and noise blanker. IF shift and notch. S-meter; dual time zone clock; passband offset; selectable AGC; built-in speaker; dual timers, multiple antenna inputs; sequential tuning; 3 selectable tuning step sizes. Direct entry mode and bandwidth selection via keypad. Selectable sideband, synchronous AM detector. RS-232 computer control, optional interface software for MS-DOS computers. Connections for external speaker and tape recorder. Multi-voltage power supply. 13½" w x 5½" h x 13"d, 13 lbs..... **\$1199⁹⁵**



1590 VHF Converter
Low VHF (35–55MHz) & High VHF (108–174 MHz) coverage when installed in the R-8B..... **\$219⁹⁵**



MS-8 Matching External Speaker... for R-8B..... **\$49⁹⁵**



SW-8 Communications Receiver • Covers 100kHz to 30MHz, 87 to 108MHz (FM stereo with headphones) & 116 to 136MHz Aircraft. 70 scannable memories. Standard and synchronous detection AM, selectable SSB reception on the Medium and Shortwave bands. Direct frequency entry keypad, 0.5uV sensitivity, dual 6 or 4 kHz AM selectivity, 2.3kHz SSB selectivity. High contrast LCD readout; 100Hz tuning accuracy. Dual-mode clock/timer. AC adapter supplied, or use optional batteries for portable operation. 11" w x 5¼" h x 11¾" d, 10 lbs.... **\$799⁹⁵**



SW-1 Shortwave Receiver (right) Covers 100kHz–30MHz with synthesized microprocessor controlled tuning; 32 programmable memories. Easy tuning by Tuning Dial; Up/Down Buttons or Direct Keypad Entry. Dual antenna inputs for coaxial feedline or wire antenna. 12VDC or use the supplied AC adapter. 10½" w x 4¾" h x 7¾" d, 4.7 lbs... **\$299⁹⁵**



SW-2 Shortwave Receiver Same as SW-1 except *added features*: Synchronous detection; 100 memories; larger display; Dimmer; Rear speaker jack. Improved sensitivity and selectivity. Optional convenient infrared remote control unit is available (pictured left) **\$499⁹⁵**

YAESU

FRG-100B High Performance Communications Receiver

Covers 50kHz to 30MHz – CW, SSB, AM modes; FM optional. Tuning steps: CW/SSB 10/100Hz; AM/FM 100/1000Hz. Fifty fully-tunable memory channels store frequency, mode and filter selection. Two additional band edge memories allow scanning between two programmable limits. Multi-function scanning (memory, band selectable group, priority) with carrier or time-delay resume enables convenient searching for new stations, or scanning within a known band. Adjustable SSB carrier offset, selectable AGC rate, noise blanker, all mode squelch, RF attenuator, twin 12 and 24 hour programmable clocks with on/off timer and sleep-timer, CAT system for PC control. Bright backlight LCD readout with adjustable control. 120/240 VAC or DC 12–14V @ 1.2A maximum 9½" w x 3¾" h x 9¾" d, 6.6 lbs (See Price List for optional filters, hi-stability oscillator and direct entry keypad)..... **\$619⁹⁵**



MFJ

8100W Regenerative Receiver

Stations world-wide come in loud and clear with just a 10' wire. Tune international shortwave, hams on SSB and CW, RTTY and packet. radio. Covers 75 to 13M SW bands. Vernier drive tuning. Uses a 9V batt., Walkman-type earphones or plug-in speakers. 7" w x 2½" h x 6" d, 1 lb wired **\$79⁹⁵**



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The 3,000 sq. ft. store has a constantly rotating stock of pre-owned radios and accessories, test equipment and components. There's a huge selection of over 40,000 vacuum tubes of all types, new and used, from miniatures to RF power amplifier types.

Items on the well-stocked shelves and in the bins reveal a 70-year history of radio from the hamshacks of radio experimenters; old-timers and today's amateurs alike. Call Neil today, or stop in and visit next time you're at AES, you'll be amazed!

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1-800-462-9489

SHORTWAVE ACCESSORIES

MFJ ENTERPRISES, INC.



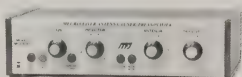
784B Super DSP Filter Digital Signal Processing automatically eliminates heterodynes and reduces noise & interference on SSB/CW/AM, all digital modes, VHF, EME & satellite. Tunable FIR linear phase filters minimize ringing, prevent data errors, and have up to 60dB attenuation as close as 75Hz away. Tunable Spotting Tone™ automatically tunes the CW filter even in the narrowest bandwidth. Adaptive Tuning™ center frequency tuning automatically becomes finer as you narrow the bandwidth making extremely narrow filters easy-to-use. Automatic notch with variable aggressiveness. 2 watt audio amplifier with AGC. 12V DC or 110VAC with MFJ-1315. 2 1/2" h x 9" w x 6" d. **\$229⁹⁵**



752C SSB/CW Audio Filter (left) Pull out stations from noise and interference. Peak, notch, low or high pass control helps to eliminate heterodynes and interference. Filters tune 300 to 3000Hz; bandwidth varies from 40 Hz to almost flat; notches to 70dB. Noise limiter. Switchable inputs for two radios. Use 9 to 18VDC or 110VAC with MFJ-1312B. 10" w x 2" h x 6" d. **\$89⁹⁵**

956 LW/MW/SW Preselector/Tuner (right) Improves reception of signals from 150kHz-30MHz. Boosts signals while rejecting images, intermodulation, and other phantom signals. 2" h x 3" w x 4" d. **\$39⁹⁵**

959B Antenna Tuner and Pre-amplifier



For 1.6 to 30MHz, provides a proper impedance match between antenna and receiver for best reception. Built-in 20dB preamplifier with gain control and 20dB attenuator. Select from two antenna inputs for two receivers. 9 to 8V DC or 110V AC with MFJ-1312 adapter. 5" w x 2" h x 6" d. **\$99⁹⁵**

1024 Outdoor Active Antenna

For 50kHz-30MHz reception. A separate RF Amplifier Module with a 54" whip mounts anywhere outside with an interconnection made by a supplied 50 ft. coaxial cable



to the Control Unit, inside. The control unit contains a gain control and 20dB attenuator to prevent receiver overload from the amplifier. Switches select between two receivers and auxiliary antenna. LED "on" indicator. Auxiliary input and output jacks. 12VDC or 110VAC with MFJ-1312. Control unit: 6" w x 2" h x 5" d, Outside module unit: 3" h x 4" w x 4" d. **\$119⁹⁵**

1020B Indoor Active Antenna

Covers 300kHz-30MHz in five bands. Built-in 21 inch telescoping antenna provides maximum signal strength. Also functions as a preselector when using an external antenna. Minimizes intermodulation, improves selectivity and reduces noise. Tune, Band, Gain, On-Off/Bypass controls. Uses 9V battery, 9-18V DC or 110V AC with MFJ-1312B. 5" w x 2" h x 6" d. **\$69⁹⁵**



462B Multi-Reader

Decode RTTY, ASCII, CW & AMTOR signals from Amateur, Commercial, Military, Weather, Aero and Marine. Plugs into receiver phone jack; displays messages on a 16 character LCD display. 12V DC. 5 1/2" h x 2 1/2" w x 5 1/2" d. **\$169⁹⁵**



AMECO TPA Tunable Preamplifier & Active Antenna Covers the 2 to 30 MHz range in 5 bands. Use it with an outside antenna as a tunable preamplifier with better than 20dB gain and low noise figure, or as an effective indoor active antenna using the built-in 30 inch collapsible whip. Requires 9V battery or 110V AC from the optional PT-9T AC adapter. 2 1/2" h x 8" w x 6 1/2" d. **\$76⁹⁵**

ANTENNA SUPERMARKET

EAVESDROPPER Shortwave Antenna



A center-fed dipole with an 8-trap configuration. Provides reception of all shortwave bands from 11-90 meters. Includes Zap-Trapper™ gas-tube lightning arrestor and 50 feet of support rope. Overall length is 42 feet and comes fully assembled.

When ordering, specify with 100 feet of 72Ω twin lead, or weatherproofed coaxial center connector (coaxial cable is not included). **\$79⁹⁵**

ALPHA DELTA COMMUNICATIONS, INC.



DX-SWL Shortwave Sloper Antenna Covers 13, 16, 18, 19, 21, 25, 31, 41, 49, 60, 90 & 120 meter shortwave bands, plus the AM broadcast band. Sloper design provides outstanding reception of low-angle DX signals. Multi-band transmit capability with an antenna tuner, handles up to 2000 watts. Overall length is 60 ft., requires 50Ω coaxial cable. **\$79⁹⁵**



DX-ULTRA Shortwave Dipole Covers AM Broadcast through 30MHz. Efficient, low-noise, broadband performance for Medium Wave, Tropical, International SW, Military, Government, Embassy, Maritime, Aircraft, Commercial & Utility frequencies. Designed with inductors, parallel wire elements and a center insulator with a built-in static electricity Protector. Length is 80 ft. - may be installed as a dipole, inverted-V, or full sloper. It can be used with an antenna tuner as a transmit antenna up to 2kW. Connector accepts coaxial cable or balanced line. Assembled **\$119⁹⁵**

See the Index under Alpha Delta and Polyphaser for Lightning Protection devices.

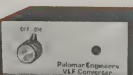
Palomar Engineers

VLF CONVERTERS

Receives and converts the 10 kHz to 500kHz Very Low Frequency band to 80 meters. Two models tune this low range on a General Coverage receiver or Ham Band transceiver. Uses 9V battery. 2" h x 4" w x 5" d.

VLF-A Use with Ham Band transceiver. **\$89⁹⁵**

VLF-S Use with General Coverage receiver. **\$89⁹⁵**



ROSETTA laboratories



Plug-in Receiver Card

Screen Display

The WINRADIO package contains a Receiver Card, Software, Handbook and an indoor antenna.

Receiver • A PC card that simply plugs into a slot in the motherboard of your IBM compatible computer to turn it into a sensitive wideband receiver with awesome features and powerful scanning options. The card contains the entire microprocessor controlled receiver with connectors for an antenna and an external speaker or headphones.

Software • The package contains a Windows program with impressive graphics of an actual receiver front panel with readout, labels and controls. Using the keyboard or mouse, WINRADIO can be operated exactly like a professional radio receiver with features found on high quality equipment. Includes on-line help and a DOS command-line program.

Handbook • The handbook provides an introduction to WINRADIO and radio scanning, with a start-up list of interesting stations to try including NASA space program frequencies. Also contains interfacing information needed by programmers to create their own WINRADIO applications.

Technical Specifications

Receiver Type: PLL-synthesized, triple conversion superhet.
Frequency Range: 500kHz to 1.3GHz (Cellular Blocked)
Tuning Steps: 1kHz to 1 MHz
Modes: AM, FM-W, FM-N, SSB
Sensitivity: 1uV (nominal)
Audio output: 200mW into 8Ω load

CLOSEOUT \$399⁹⁵

System Requirements

IBM PC compatible with 386 processor or higher • DOS 3.3 or higher, or Windows 3.1 or higher (including Windows 95) • 640kb RAM (4MB recommended for Windows uses) • Vacant slot for 16-bit interface card • Speaker or headphones with standard 3.5mm stereo plug.

BMI Nitellogger II

Automatic Tape Recorder Activator Takes audio from any 8 ohm source and provides a 600 ohm match and voice activated relay operation for a tape recorder. Three connections: the radio's external speaker jack, the recorder's remote and microphone input jacks. This device can also make a simple crossband repeater by connecting up two HT's. Built-in monitor speaker with volume, drop-out sensitivity and delay controls, record light. 110V AC adapter supplied. **\$69⁹⁵**

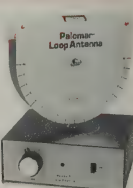
RC-1A Impedance Matching Patch Cord Provides a proper impedance match between an 8 ohm audio source and a 600 ohm tape recorder input. Provides proper loading for the source device, an attenuator prevents recorder input overload. 3.5mm audio plugs. **\$19⁹⁵**

LA-1 Loop Antenna

Picks up less noise than other antennas. Six plug-in loops for various frequency ranges VLF to 15MHz, rotate and tilt to produce sharp nulls that cancel interference and noise. Built-in 20dB preamp compensates for size. 2 1/2" h x 7 1/2" w x 6" d. **\$99⁹⁵**

Plug-in Loops for LA-1

Coverage: 40 to 150kHz, 150 to 550 kHz, 550 to 1600kHz, 1.6 to 5MHz or 5 to 15MHz. **\$99⁹⁵ ea.**



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ICF-SW1000T

With the ICF-SW1000T, you can tune in—
record—news or other programs from all over the world.
The built-in stereo cassette recorder lets you record
directly from the radio and offers a convenient Tune
Record Function, Ten-key Direct Access™ tuning simplifies
tuning in your favorite distant stations, while synchronous
detection circuitry ensures the cleanest possible reception.

- LW/MW/SW/FM Stereo Reception over a wide range of frequencies.
- SSB (Single Side Band) and synchronous detection for reception of SSB broadcasts. Can also help reception of weak signals.
- PLL Quartz Digital Synthesized Tuning for accurate and drift-free tuning.
- 3-Page Random Memory preset tuning to save your favorite stations. Total of 32 random memory presets.
- 1 KHz Step Tuning to lock in on precise station reception.
- Stereo Cassette Recorder (play/record) with auto reverse and tape select to record directly from the radio or play your own cassettes.
- Timer Record Function to record directly from the radio at a preset time.
- Built-in Clock with alarm, dual standby and sleep timer function.
- Dimensions (WHD): 7" x 4 1/8" x 1 5/8".

ICF-SW1000TS

World Band Receiver with
System Kit

This powerful Stereo World Band
System comes complete with
receiver and accessories.

- Comes with ICF-SW1000T FM Stereo World Band Receiver (radio left).
- Includes AN-LPT Active Adjustable Loop Antenna (antenna).
- LPT-AD Adaptor.
- Complete stereo headphones and stereo microphone.
- Soft carrying case supplied.

*Get to know the world as
you never have before
with Sony World Band
Receiver™ radios.
High-performance Sony
World Band Receiver radios
and accessories boast the
advanced technology
that makes your global
exploration possible.*

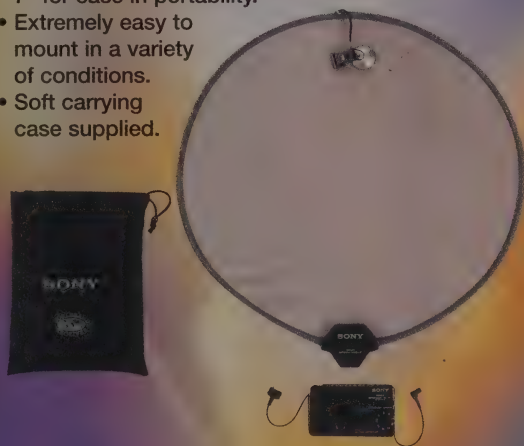
*Sony receivers let you
survey breaking events
and world business trends,
enhance your language
skills or your cultural
awareness, follow major
sporting events or simply
track the weather. And
user-friendly functions,
such as built-in clocks and
convenient tuning methods,
make it easy.*

AN-LP1

Active Antenna

This lightweight active portable loop antenna enhances your receiver's sensitivity for clearer reception of even weak signals.

- Provides high sensitivity and noise reduction.
- Active antenna controller with rotary tuning.
- Works with most Sony World Band Receiver radios
- 19" loop antenna that folds to 7" for ease in portability.
- Extremely easy to mount in a variety of conditions.
- Soft carrying case supplied.



ICF-SW7600G

Turn on the ICF-SW7600G and meet the cultural heroes and pop icons of countries around the world. Ten-key Direct Access tuning and 22 station memory presets make finding your favorite stations push-button easy.

- AM (LW/MW/SW) and FM Stereo Reception.
- PLL Quartz Frequency Synthesized Tuning for accurate and drift-free tuning.
- Synchronous Detection Circuitry to reduce fading and interference.
- Dual Conversion Super Heterodyne Circuitry for increased sensitivity.
- SSB Reception for a wider range of listening options and improved reception of weak signals.
- Manual and Auto Scan Tuning.
- 1 KHz Step Tuning to lock in on precise station reception.
- Built-in Clock with sleep timer and dual standby functions.
- Large 3" Speaker.
- Dimensions (WHD): 7 5/8" x 4 3/4" x 1 5/16".

ICF-SW7600GS

World Band Receiver Radio System Kit

An active antenna enhances the reception capabilities of the ICF-SW7600G receiver.

- Comes with ICF-SW7600G FM Stereo Multi-Band World Band Receiver radio (above).
- Includes AN-LP1 Active Portable Loop Antenna (left).
- 120 VAC adaptor.
- soft carrying case supplied.

From the comfort of
home.

Follow the course of world politics and business. . .



ICF-SW77

Staying on top of world events is virtually effortless with the ICF-SW77. A 5-event programmable time reminder lists of programs you don't want to miss and allows uninterrupted recording. Up to 162 memory presets help you keep track of favorite programs for easy tuning, while Station Name Tuning allows direct tuning by broadcaster name.

- AM (LW/MW/SW) and FM Stereo Reception over a wide range of frequencies.
- PLL Quartz Frequency Synthesis Tuning for optimum stability and better reception.
- SSB Reception for a wider range of listening options and improved reception of weak signals.
- Station Name Tuning (with editable labels).
- Synchronous Detection Circuitry to reduce fading and interference.
- Backlit LCD Display with contrast adjustment.
- 10-Key Direct Access Tuning.
- Universal Time Coordinator with world time scale.
- Manual or Automatic Scan Tuning with 50 Hz step tuning.
- Electronic Rotary Tuning Dial for convenient manual tuning.
- 5" x 3" Speaker for excellent reception of voice or music broadcasts.
- Dimensions (WHD): 10 7/8" x 6 7/8" x 1 7/8".

With Sony World Band Receiver radios, you can tune in broadcasts on familiar FM and AM and shortwave frequencies. Short (higher-frequency) waves are reflected by the Earth's ionosphere, rather than absorbed like long and medium waves, so they can travel great distances—and you can hear programs from halfway around the world.

Because shortwave broadcasts can be adversely affected by atmospheric conditions, programs are often broadcast at various times and/or on various frequencies. The advanced reception and tuning features of Sony World Band Receiver radios help to maximize your ability to receive the programs you want to hear.

ICF-2010

Performance and convenience distinguish the ICF-2010. It begins with an industry reputation as one of the best World Band radio receivers ever made. Combine this with tuning accuracy and reliability and the ICF-2010 has become a reference standard of the industry. Direct Access tuning for directly keying in station frequencies and 32-station memory. With the ICF-2010, you can receive Air Band as well as FM and full AM frequencies.

- Full AM Band Coverage (LW/MW/SW) plus FM and Air Band Reception.
- SSB Reception for a wider range of listening options and improved reception of weak signals.
- Dual PLL Quartz Frequency Synthesized tuning for superb reception.
- Synchronous Detection Circuitry reduces fading and interference.
- Switchable "IF" Band Width.
- Manual, Automatic and Memory Scan Tuning.
- Programmable Time-out for convenience of World Band reception.
- Alarm Clock with alarm, snooze and sleep timer functions.
- Dimensions (WHD): 11 1/2" x 5 3/8" x 2 1/8"



ICF-SW40

With a 44-band range of frequencies, the ICF-SW40 is an easy-to-operate, user-friendly receiver that's ideal for polishing your language skills and a host of other uses.

- Easy to use design combines the ease and familiarity of conventional analog operation with the accuracy and stability of digital tuning.
- AM (LW/MW/SW 1-11) and FM Stereo Reception.
- PLL Quartz Digital Synthesized Tuner for drift-free tuning.
- 20 Station Memory Presets for easy tuning of favorite stations.
- 1 KHz Step Tuning to lock in on precise station reception.
- Built-in Clock with dual standby function.
- Dimensions (WHD): 6 3/4" x 4 1/4" x 1 7/16".



Or immerse yourself in
international cultures.

Savor local color when you travel...



ICF-SW100S

World Band Receiver Radio Kit

Experience any destination as the locals do with the ICF-SW100S. About the size of an audio cassette and weighing less than 8 ounces, it's ideal for travel. You can tune in local broadcasts or search for frequencies you don't receive at home. And its World Time Clock, with 24-city name/time display, lets you calculate the time in any city worldwide.

- AM (LW/MW/SW) and FM Stereo Reception.
- PLL Quartz Frequency Digital Synthesized Tuning for accurate and convenient tuning.
- Dual Conversion Super Heterodyne Tuner Circuitry for high sensitivity.
- 50 Station Memory Presets.
- Editable Station Labels.
- Auto Scan, Manual and 10-Key Direct Access Tuning.
- Built-in Clock with sleep timer and dual standby function.
- 1 KHz Step Tuning to lock in on precise station reception.
- Kit includes compact stereo headphones, 120 VAC adaptor, active antenna and soft carrying case.
- Dimensions (WHD): 4 3/8" x 15/16" x 2 7/8".



ICF-SW30

For simplicity of operation, the ICF-SW30 receiver is ideal for commuters, students—just about anyone. With a News/Music Tone Switch, it offers maximum clarity whether you're listening to voice or music.

- 10-Band Receiver including FM Stereo, AM and SW Bands 1-10.
- Dual Conversion Tuner Circuitry for high sensitivity.
- 15 Station Memory Presets.
- Digital Synthesized Tuning to simplify tuning of the desired station.
- Auto Scan Tuning.
- 1 KHz Step Tuning to lock in on desired station reception.
- Built-in clock with alarm.
- Dimensions (WHD): 6 3/4" x 4 1/2" x 1 2/16".

Whether you are listening to programs at home or abroad, for business or pleasure, you can count on the sensitivity, selectivity and stability of Sony receivers to deliver the clear reception and ease of operation that you want from a world band radio.

Sony receivers offer such features as Synchronous Detection, PLL Quartz Synthesis Tuning, Direct Access tuning and Single Side Band reception to ensure the ultimate in clear reception and easy tuning. Sony World Band Receiver radios—there's a model that's right for you.



ICF-SW12

With 11-band receiver and the Universal Time Coordinator, the ICF-SW12 with protective cover is an ideal radio to travel with in today's world. Convenient features make it easy for you to tune in a worldwide range of frequencies.

- 11-Band Receiver including FM, AM and SW Bands 1-9.
- Designed for travel use in a compact size and with protective lid.
- World Time Clock and Universal Time Coordinator to display time for cities worldwide.
- Backlit LCD Display for easy viewing of time and alarm setting.
- LED Tuning Indicator for precise center-frequency indication and accurate tuning.
- Built-in Alarm with convenient snooze button.
- Dimensions (WHD): 1 1/2" x 4 3/8" x 3 1/8"



ICF-SW10

Whether you travel across the country or around the world, the compact ICF-SW10 can bring you the programs you want to hear.

- 12-Band Receiver including FM Stereo, MW, LW and SW Bands 1-9.
- Easy Analog Tuning with LED Indicator.
- FM Stereo Headphone Jack for private listening in noisy environments.
- DC-In Jack for optional AC adapter to conserve battery life.
- Compact size.
- Dimensions (WHD): 6 1/2" x 3 3/4" x 1 5/16"

But never be far from
home.

regular



EXTRA STRENGTH

SONY


Listen to late-breaking world events at their source. Tune in to major sporting events, and cheer on your favorite team. Brush up on your French. . . or your Arabic. . . or your Chinese. **Sony World Band Receiver™** Radios bring the world in loud and clear—wherever you are—with the latest in receiver technology. Whether you're a novice or a radio buff, there's a Sony World Band Receiver Radio with user-friendly features designed for you.

Sony World Band Receiver Radios. Hear the world.

www.sony.com

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**3 million
frequencies
only he
can hear.**

**Only Sony can turn your PC into a
watchdog of the airwaves with the Sony
Radio Frequency Scanner and CD-ROM
frequency database.**

Use the Sony Radio Frequency Scanner with PC Interface and be forewarned about approaching weather systems, traffic conditions and emergency situations. You can even get inside information at some of your favorite sporting events. The Sony CD-ROM gives you easy access to listings of 3 million U.S. frequencies. It makes scanning fast and easy.

A unique bi-directional PC interface lets you use your PC to control all the Sony Radio Frequency Scanner's standard functions, as well as its special features, including:

- 20 programmable Scanning Ranges.
- Virtually unlimited Memory and Skip Preference Files.
- Data Import and Export between Scanner and PC.
- A searchable CD-ROM database of over 3 million U.S. frequencies.

Performance you can rely on

The Sony Radio Frequency Scanner with PC Interface is a powerful hand-held scanner with the latest scanning circuitry for top performance. It features the full range of functions and features scanner enthusiasts want:

- 25MHz to 1,300MHz Frequency Scanning
- 300-Channel Memory for personal customization.
- Public Service Scan of 9 pre-programmed bands, including police, air, fire/emergency, weather, marine, FM, and TV.
- Intelligent Active Memory that saves the 10 most recently received frequencies for convenient recall.
- AM and Narrow and Wide FM Reception
- Back-lit Display
- Compatible with Windows® 95

**The Sony Radio
Scanner with
PC interface. . .
watchdog of the
airwaves.**

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SONY®

SCANNERS



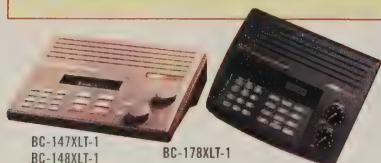
Scan the Action!
Ham Radio • Police
• Fire • Emergency
Highway Patrol •
Paramedics •
Weather Sports
Events • More!

VHF Low/High & UHF — Police, fire, ambulances in smaller cities/towns. State police. Railroads. VHF-marine. 2-meter & 70cm Ham bands. Businesses. NOAA weather. Government.

VHF-Air — Commercial and private planes. Airport towers. Aviation-related communications. Air navigation.

800MHz — Police, fire & emergency services in major cities and metro areas (trunked). Some business 2-way radio systems. (Cellular freq. blocked.)

Extended Coverage — Military aircraft. Amateur radio. Some wireless microphones. Some radio/TV remote links. Microwave communications.



BC-147XLT-1

BC-178XLT-1

BC-147XLT-1 16 channel base unit with 10 bands, including weather. Covers 29-29.7, 29.7-50, 50-54, 136-144, 144-148, 148-174, 406-420, 420-450, 450-470 & 470-512 MHz. Two-digit LED display for current channel selection & scanning. Keyboard entry; Direct channel access; Manual set tuning; Lockout; Priority; Review; Weather search; Automatic squelch; track-tuning; Mem. back-up. 9" w x 2 1/2" h x 6 1/2" d, 1.2 lbs. **\$99⁹⁵**

BC-148XLT-1 20 channels, 10 bands w/weather alert. Digital; Programmable; AC/DC operation. Frequency coverage: 29-54, 136-174 and 406-512 MHz. Weather; Priority; Lockout; Squelch. AC adapter & telescoping antenna. 9" w x 2 1/2" h x 6 1/2" d, 1.2 lbs. **\$99⁹⁵**

BC-178XLT 100 channel programmable base unit w/aircraft. 11 bands, 5 scanning banks. LCD display; TurboScan™ & search; Weather scan and search; Five priority channels; Data skip; Service search; Automatic squelch; Programmable delay. AC adapter and telescoping antenna. 9" w x 6 1/2" x 2 1/2", 1 lb. 7 oz. **\$139⁹⁵**

BC-350A 50 channel mobile or base unit with Aircraft; 11 bands, LCD display; Super TurboScan™ @ 100 channels per second. 20 programmable Private Channels; 20 programmable Police Channels; 10 programmable Fire & Emergency channels. Band scan for aircraft; Marine & Weather; Band search. Mounting bracket; AC adapter, DC & cigarette power cords. 5 1/2" w x 6 1/2" x 1 1/2", 1 lb. 11 oz. **\$119⁹⁵**

BC-700A 50 channel programmable Mobile/Base unit with Aircraft. 12 bands, LCD display, Turbo Scan™. Same as BC-350A with 800MHz (no cellular)... **\$169⁹⁵**

BC-760XLT 100 program. channels, 5 scanning banks, 12 bands & weather. Covers 29-54, 118-136, 144-174, 406-510, 470-512 & 806-956 MHz (no cell). Auto search; Priority. 13.8V DC, 110V AC adapter included 6" w x 1 1/2" h x 7 1/2" d, 1 lb. 3 oz. **\$219⁹⁵**

BC-895XLT "Trunk-Tracker" 300 channels, 12 bands including Aircraft and 800 MHz; 10 banks. Covers 29 to 956 MHz (cell blocked). Turbo™ Scan; One-touch weather; Weather alert; Manual channel access; Built-in CTCSS; Trunk search; Scan lockout and delay; RS-232C port; VFO control; 10 priority channels; Signal strength meter; Auxiliary tape output; Automatic store; 30 trunking channel indicator annunciators; 3-day Memory backup; Programmable search; Lockout. 10 1/2" w x 3 3/8" h x 7 1/2" d, 3 1/2 lbs. **SPECIAL \$229⁹⁵**



BC-860XLT

BC-9000XLT

BC-860XLT 100 channels, programmable with Aircraft. 12 bands, 10 banks. Covers 29-956MHz (no cell). Full freq. LCD display; TwinTurbo™ Scan & Search modes; One-touch weather; Manual channel access key; Priority mode. 9" w x 2 1/2" h x 6 1/2" d, 1.2 lbs. **\$189⁹⁵**

BC-9000XLT 500 channel continuous band scanner. Covers 25-1300MHz (cell-blkd). 20 banks. VFO control; 10 priority channels; AM-FM/wide & narrow FM modes; TurboScan™ & search; LCD dot matrix alpha display w/illuminated control; Data skip; Transfer; Auto store; Aux. line output for recording; 110V AC adapter, opt. CTCSS. 10 1/2" w x 7 1/2" d x 3 1/2" h, 4 lbs. **\$429⁹⁵**



BCT-7

BCT-10/12

BCT-7 Bear Tracker 800 Pre-programmed with all frequencies for Highway Patrol, D.O.T., Local/County Police, News, Fire, Aircraft & CB services. Selectable by state (except Hawaii). 12 bands, 100 user programmable channels: Highway Patrol Priority Alert; Data Skip, Weather Scan. 13.8VDC, 110V AC adapter and mobile mount included. 5" w x 7" d x 1 1/2" h, 1 lb, 11 oz **\$189⁹⁵**

BCT-10 BearTracker Highway Information System A sophisticated highway alarm system with 886 pre-programmed frequencies that responds to radio signals emitted from special secondary transmitters installed on most highway patrol vehicles. Audible and visual alarms, plus signal strength LEDs indicate the presence and distance of patrols..... **CLOSEOUT \$129⁹⁵**

BCT-12 BearTracker Highway Information System Covers low, high, UHF and 800MHz Highway Patrol, Police, Sheriff, Weather, News and Transportation frequencies for all 50 states and Canada. Weather emergency tone alert, priority, channel lockout, digital signal meter level meter..... **\$199⁹⁵**

SC-150B "SPORTCAT" 100 channel program. handheld scanner w/Aircraft, Weather & 800 MHz band (no cell). Designed for the racing fan with 10 one-touch, direct access keys for instant selection of active sports channels: motor racing, air shows & special events. 12 bands; 10 scanning banks; LCD display; programmed band search; data skip. TurboScan™ scans at 100 channels per second, allowing instant access up to 100 memorized frequencies in the 29-54, 108-174, 406-512 & 806-956MHz bands. 10 preprogrammed TurboSearch™ keys allow band-edge to band-edge frequency locating at 300 channels per second. Rechargeable batt., wall charger, flex antenna, belt clip & earphone. 2 1/2" w x 1 1/4" d x 6" h, 12 oz..... **\$179⁹⁵**



Channel Master Scanner Antenna

Extend your scanner range with an externally mounted wide-band Channel Master Monitenna. Best scanner reception for 30-50, 148-174, 450-470, 470-512 & 800-912MHz.

5095A High-strength aluminum, weather protected. Everything for roof-top installation: Monitenna, 50' of coaxial cable with Motorola plug, 5' tri-mast mount, 2" extension stand, double-headed nails and sealing washers.

CLOSEOUT • \$49⁹⁵



We accept I.M.P.A.C.® Government Credit Cards



BC-60/80XLT

BC-120/230XLT

BC-3000XLT

BC-235XLT

BC-60XLT-1 30 channel, program. handheld scanner. 10 bands. Covers 29 to 512 MHz. Two-digit LCD channel display; Programmable chain search; One-touch weather; Lockout; Memory backup; Low-battery indicator; Keypad lock; Built-in scan delay; Manual channel access; Track tuning; Keypad lock feature. Uses four "AA" alkaline or nicads or AC operation with included 110V AC adapter. 2 1/2" w x 6 1/4" h x 1 1/2" d, 10 1/2 oz. **\$99⁹⁵**

BC-80XLT 50 channel, program. handheld scanner. Covers 29-956MHz (no cell). 11 bands, 5 banks, 5 priority channels and One-touch weather. Manual channel access; Bands search; Full frequency LCD display; Battery-low indicator. Uses four "AA" alkaline or nicad rechargeable batteries (not incl.). AC adapter included for 110V operation. 2 1/2" w x 6 1/4" h x 1 1/2" d, 10 1/2 oz **\$149⁹⁵**

BC-120XLT 100 channel, programmable handheld scanner with Aircraft frequency coverage. 11 bands, 10 scanning banks, LCD display, Turbo Scan™ and search. One-touch weather, 10 priority channels, data skip, memory backup. Belt clip, battery and wall charger included. 2 1/2" w x 1 1/4" d x 6" h, 1 1/2 oz..... **\$149⁹⁵**

BC-230XLT 200 channel, program. handheld scanner with Aircraft & 800MHz (no cellular). 12 bands, 10 scanning banks. Programmable search. LCD frequency display, Turbo Scan™ and search. One touch weather access, 10 priority channels, data skip, memory backup. Includes two rechargeable nicad batteries and charger module, belt clip. 2 1/2" w x 1 1/4" d x 6" h, 12 1/2 oz.... **\$199⁹⁵**

BC-3000XLT 400 channel, continuous band scanner. Covers 25 to 1300 MHz (no cellular) in 12 bands. 20 scanning banks, 10 priority channels. VFO control; TurboScan™ and search, auto-weather, auto-store; channel lockout. Includes rechargeable nicad battery and charger. 2 1/2" w x 1 1/4" d x 6" h, 12 1/2 oz. **\$399⁹⁵**

BC-235XLT "TrunkTracker" 300 channel, programmable handheld scanner. 12 bands including Aircraft and 800 MHz. Covers: 29 to 956 MHz (no cellular). Programmable search; Trunk lockout; Memory backup; Trunk delay; Manual channel access; Trunk scan; Preprogrammed service search; Trunk search; Channel lockout; 10 priority channels; AC/DC operation, includes two rechargeable nicad batteries & charger. 2 1/2" w x 6" h x 1 1/4" d, 12 1/2 oz. **SPECIAL \$219⁹⁵**

For information and educational material pertaining to scanners and scanning see page 87.

ALINCO

DJ-X10 Professional Multifunctional Wideband Receiver

Covers 0.1 to nearly 2000MHz (cellular blocked), and all modes. FEATURES: Dual VFO; Memory (MR); Scan programming (PMS); One-touch switching; 1200 memory channels (40 CH x 30 banks). SCANNING: Programmable (PMS); Memory; Mode-selected; VFO scan; VFO linked; Priority. CHANNEL SCOPE: Switchable between 40 & 7 CH with Continuous, Interval, Peak and Single search. Built-in 24 hour clock with ON/Off timer. Built-in cable cloning function..... **SPECIAL \$359⁹⁵**



NEW

X-10 ACTIVEHOME™
with the touch of a button control your entire home

EASY TO USE PC-BASED, WIRELESS HOME AUTOMATION SYSTEM.

CONTROL EVERYTHING IN YOUR HOME INCLUDING LIGHTS, APPLIANCES AND HOME THEATER.

A PRICE UNBELIEVABLE HOME AUTOMATION SYSTEM.

Wireless Home Security

X-10, leader in the field of wireless home security and home automation, brings you these state-of-the-art products to protect your family & electronic equipment. Order a complete system or design one from a list of products & accessories.

Home security monitors doors. Motion sensors cover wide areas in or around the house. It can call a friend or neighbor if activated. Ward off potential problems with the sound of REX, an electronic barking dog.

Home automation is here now & X-10 provides it! Hot coffee waiting in the morning, turn lights on/off and heat up/down automatically or at the push of a button. Set it up to run from a PC..... **See Price List**



Freeplay® Radio Generates its own power - no batteries or external power needed. Perfect for activities, emergencies, power outages. Inside the **Freeplay Generator** (wind-up B-motor carbon steel spring driving generator thru transmission) produces operating voltage. Short wind-up yields up to an hour of free listening, depending on model & volume level. Built-in ferrite bar & antenna, external power & headphone jacks.

FPR-2 (right) AM & FM broadcast band coverage, 60 min. operation. 8" h x 11 1/2" w x 8" d, 5 lbs, 5 oz. **\$69⁹⁵**

FPR-1B (left) AM & FM plus 5.8 to 18MHz shortwave coverage, 30 minutes operation. 10" h x 13 1/2" w x 5 1/2" d, 6 lbs, 3 oz. **\$99⁹⁵**

AC ADAPTER for BayGen FPR-2 only..... **\$10⁹⁵**

HEADPHONES for BayGen FPR-2 only..... **\$14⁹⁵**

Freeplay® Solar Radio

Same as FPR-2 above, w/addition of a solar panel powering radio when exposed to sunlight. Will run off panel alone in direct sunlight; as light decreases, radio automatically draws from spring.

Clear plastic case shows off generating mechanism.

FPR-2SC \$79⁹⁵ • FPR-2SM same, gray case \$79⁹⁵

Freeplay® Lantern A self-powered, illumination device working off its own internal generator or rechargeable batt. Each 30 second wind-up of the spring engine provides minimum 3 minutes of light in "on" position and charges battery in "charge position." In batt. mode you get 2 hours of light. Has auxiliary power output socket (3V, 350mA) and a high pressure Xenon filled ultra-brite bulb. It's weather resistant & made of rugged nylon & reinforced materials. Includes a 1Hz flasher unit (1 second on, 1 second off). 7" x 10" x 5 1/2", 4 lb. 7 oz **BAY FP-SL \$69⁹⁵**

uniden Marine

MC-1010 80 channel Marine VHF Radio • All USA and International channels, 10 weather channels • Ultra compact rugged construction • New durable design microphone • Triple watch feature • Memory scan • weather scan • 25 and 1W output • LCD display • External speaker jack • 12V DC @ 4.5A • 6 1/2" w x 4 1/2" d x 2 1/2" h, 1 lb, 12 oz..... **\$139⁹⁵**

MC-1020 80 channel Marine VHF Radio • All USA & International Channels, 10 weather channels • Ultra compact rugged construction • Quik Command™ microphone-with-touch channel 16 & 19 key • Triple watch Plus™ • Memory scan • weather scan & alert • 25 & 1W output • LCD display & dimmer, back lit keypad • Public address • External speaker jack 12V DC @ 5A • 6 1/2" w x 4 1/2" d x 2 1/2" h, 1 lb, 12 oz..... **\$159⁹⁵**

MC-535 80 channel Marine VHF Radio • All USA and International, 10 weather channels • Instant channel 16 • Memory scan • Dual watch • LED channel display • 25 and 1W output • Weather resistant • Front speaker, external speaker jack • 12 VDC @ 5A • 6 1/2" w x 7 1/2" d x 2 1/2" h, 2.4 lbs..... **\$119⁹⁵**

HH-980 Deluxe 90 channel Marine VHF Handheld • Microprocessor controlled • All USA and International channels, 10 weather channels • Weather alert • Front-fire speaker • Watertight • All channel scan • Instant channel 16 5/1W-selectable power • Dual watch/triple watch • LCD channel display • 7.5V @ 850mA from supplied rechargeable Nicad battery pack • 2 1/2" w x 1 1/2" d x 5 1/2" h, 1 lb, 12 oz..... **\$209⁹⁵**

HH-940 90 channel Marine VHF Handheld • All USA and International channels, 10 weather channels • All channel scan • Instant channel 16 and 9 • Triple watch Electronic touch keypad Backlit LCD display • 1W power output • Weather alert • Flexible rubber antenna • Keypad lockout • Battery charge indicator • Waterproof, lightweight and wearable • Rechargeable battery, drop-in charger • 2 1/2" w x 1 1/2" d x 4 1/2" h, 8.8 oz..... **\$159⁹⁵**

HH-955 90 channel Marine VHF Handheld • All USA & International channels, 10 weather channels • Mem. scan • Backlit LCD display • Triple watch • Instant channel 16 & 9 • Weather alert 5 & 1W output • Flexible rubber antenna • Keypad lockout • Batt. charge indicator • Weather resistant housing • Uses alkaline batt. or Ni-cad rechargeable batt. (not included) 2 1/2" w x 1 1/2" d x 6 1/2" h, 19.5 oz..... **\$129⁹⁵**

KENWOOD Marine

TKM-707 SSB Radiotelephone
A high-performance unit designed to meet the stringent demands of marine operation. Utilizes a heavy duty rustproof aluminum chassis and the highest quality parts to maximize performance.

• 150W RF Output Power • 2 MHz to 23 MHz Marine Band Operation with 500kHz to 30 MHz General Coverage receiver • 198 Memory Channels • Multi-Scanning • 2182kHz emergency alarm built-in Optional Tuner & More!

Special Order - **\$1249⁹⁵**

ICOM

Marine

IC-M3A
Miniature Handheld Marine VHF Radio
Programmable for US and International channels and weather • Independent channel 16 • Full function and priority scanner • Dual/Tri-watch • 1/5W output • Large back-lit LCD display includes NiCad batt. & wall charger • 2 1/2" w x 5 1/2" h x 1 1/2" d, 14.4 oz... **\$189⁹⁵**

IC-M710 SSB MARINE Transceivers
Rugged, 150W SSB Transceiver, 1136 channels with 160 user-programmable memories, PC programmable, alpha numeric readout on large LCD.

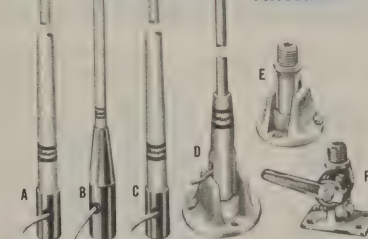
IC-M710 (04) General version without 2182kHz alarm, marine bands only..... **Special Order \$1399⁹⁵**

IC-M710 (05) Open version, covers 1.6 to 27.5 MHz, has 2182kHz alarm..... **Special Order \$1599⁹⁵**

Aircraft

A-22
VHF Air Band Transceiver
Covers (COM) 118-136.975, (NAV) 108-117.95MHz and memory channels
Programmed scan, memory scan and lock • 5W output • Instant 121.5MHz • NAV features: 200 channel VOR nav with CDI, radial heading TO/FROM VOR, Auto Bearing Set • Semi-duplex, combines VOR/COM operation • Includes Ni-cad rechargeable battery and wall charger • 2 1/2" w x 7 1/2" h x 1 1/2" d, 1.4 lbs **\$549⁹⁵**

SHAKESPEARE Marine Antennas



5202 (A) Collinear-phased 5/8-wave elements. 8 ft. long, 6dB gain, handles 50 Watts. DC grounded. Chrome-plated brass ferrule. Includes 20 ft. of coaxial cable with PL-259 connector..... **\$69⁹⁵**

497 (B) Collinear phase 5/8-wave elements. 8 ft. long, 6 db gain., handles 50W is not DC grounded. Smaller diameter absorbs flex. Includes 20 ft. coaxial cable and PL-259 connector..... **\$49⁹⁵**

5206-C (C) Economy model, 8' long, end fed with 6dB gain. Handles 50 Watts, DC grounded. 15 ft. coaxial cable & PL-259 connector..... **\$39⁹⁵**

420 (D) Center-fed 1/2-wave coaxial sleeve model. 3dB gain, 5 ft. long. Polycarbonate lift-and-lay deck mount with leveling plate, hardware and 20 ft coax cable/connector..... **\$59⁹⁵**

495 (E) Lift-& lay polycarbonate deck mt..... **\$16⁹⁵**

366H (F) Ratchet antenna mount with release handle for deck or bulkhead mounting. Has 9/32" hole for Loran cable. Standard 1"x1/4 male threads. Chrome plated zamac..... **\$29⁹⁵**

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SECURE web site
Order on-line at **www.aesham.com**



Global Positioning Satellite (GPS) brings Satellite Navigation within reach of everyone! For navigation, hunting, etc. - tells you where you are, and how to get back.

Each Magellan GPS includes a powerful 12 parallel channel receiver, wraparound rubber armoring, "EZstart" operation, auto averaging and a water-proof design.



GPS-2000XL Offers amazingly fast satellite acquisition and tight satellite lock under the toughest conditions. Other features include • 24 continuous hours on 4 "AA" batteries • 7 navigation screens, two customizable • Scratch-proof display • Shock-resistant • 200 landmarks • Message attachment to landmarks • 5 routes with 20 reversible legs • Backtrack feature • Real-time track plotter • Sunrise/set & lunar phase calculations • Re-settable trip odometer • Landmark projection • Upload/download capability, NMEA output • Latitude/longitude, UTM, OSGB, MGRS, TD's, Finnish, Irish, Swedish & Swiss grid coordinate systems • Max. Speed: 950 mph • DGPS ready • Simulator program for training • Size: 6.6" x 2.3" x 1.3" • Weight: 10 oz. Comes with lanyard strap, User & Quick reference guides..... **\$149⁹⁵**



GPS Tracker Eight customizable navigation screens on a high-resolution display, 128 x 64 pixels 30 hours of continuous battery life • 10-year internal lithium battery backup • Detachable super sensitive antenna for superior tracking • Built-in thermometer • Stores up to 500 user-entered locations & 20 reversible routes with 30 legs • 1200-point Smart Track • BackTrack with save as route option Northfinder™ displays sun & moon positions, quickly determine desired direction • Comes with wrist strap, 4 "AA" batteries, and User & Quick reference guides..... **\$229⁹⁵**



GPS ColorTRAK Featuring the world's first high-resolution, color display in a portable GPS receiver, 128 x 64 pixels • Outstanding lock-on tracking • 8 graphic navigation screens including real-time multiple route plotter w/adjustable scale • Detachable super sensitive antenna for superior tracking • 30 hours of continuous battery life • Backlit display & keypad • 10-year lithium back-up battery • Stores up to 500 user-entered locations & 20 reversible routes with 30 legs • Comes with carrying case, wrist strap, 4 AA batteries, and User & Quick reference guides..... **\$279⁹⁵**



Pioneer The first GPS under \$100 Super sensitive antenna • Tracks 12 satellites • Displays distance, bearing, heading, direction, steering, speed, time to go, elevation, XTE, time & satellite elevations Dedicated GOTO, NAV, MARK, MENU & LIGHT keys • 100 landmarks • 1 route, 10 legs • 3 graphic navigation screens • 11 map datasets • Backlit display • Wrap around rubber armoring - rugged, water proof • 24 hour battery life • Pocket-sized 6.25" h x 2.2" w x 1.1" d, 6.8 oz..... **\$99⁹⁵**

GPS Map 'N' Track CD Includes: **GPS Link 3.0** - Land mapping software links to 2000XL, Tracker & ColorTRAK (See Price List for correct model number) • **Trip planner** - plan your trip using GPS link maps; upload information and your GPS will direct you • **In-vehicle system** - connect your GPS to a laptop, track where you are on the map • **Trip recorder** - use GPS to record your track, download information and view path of travel on a digital map. **DataTrack** - GPS position and route data management software • Save and store more locations and routes. • Quickly and easily edit and review saved locations and routes. • Create new locations, plot your trip for future reference. **Precision Mapping Streets 3.0** - Land mapping software that creates custom maps. • Find any place in the U.S. • The most current and accurate information for most US streets • Create custom maps, over 100 drawing tools. Specify: GPS Map 'N' Track CD with PC interface module and 110V AC adapter or with PC interface cable, only..... **\$99⁹⁵**

See Price List for selection of Magellan & Garmin Accessories



Garmin's Personal Navigator GPS receivers are low-cost and full-featured. This family of satellite navigation equipment can guide you anywhere you want to go.



GPS-12XL Powerful 12 channel receiver for fast, accurate positioning. Designed for boaters, hunters and hikers who use a GPS in the most challenging environments.

PhaseTrac 12 parallel channel receiver for fast position fixes in the toughest conditions including tree canopy & urban obstructions • Rugged, compact case that meets military 810(e) specs • External antenna, internal beeper alarm • 500 user waypoints with alphanumeric name and user comments • 20 reversible routes of up to 30 waypoints each • TracBack navigation automatically turns your track log into a route back home • 9 proximity waypoint alarms • Over 1000 track log points position averaging, emergency erase, and cloning features • Up to 12 hours battery life on four AA batteries (not supplied)..... **\$269⁹⁵**



StreetPilot Dashboard Mount GPS Receiver Portable, 12 parallel channels • Built-in map of the Americas with state/country boundaries; lakes; rivers; cities; U.S. state, and interstate highways & some local thoroughfares • Accepts GARMIN cartridges showing residential streets, addresses & points of interest • Large high-res 240 x 160 pixel display • Three-level bright amber backlit screen & keypad • Automatic turn by turn guidance with manual route selections • Automatic waypoint and route naming • Storage for 100 waypoints (not including points of interest) • Trip planning and computer • Zoom key - 120 ft. to 800-mile range • Dashboard screen showing current trip segment, distance, direction • Clock alarm, arrival alarm • Six "AA" batteries - up to 16 hours of use, lithium back-up..... **\$549⁹⁵**



GPS-III Features road maps - without plug-in cartridges. State-of-the-art two-way screen display for vertical or horizontal orientation. Dedicated zoom keys, diagonal panning, auto start/stop trip timer, average & maximum speed recordings. Operating system continuously tracks up to 12 satellites • Rocker keypad, backlit LCD display, full featured moving map plotting • Dedicated keys for zooming from 0.2-360 miles User selectable navigation screens for computer or graphic highway steering guidance Two-way screen flips horizontal or vertical with push of a button..... **\$299⁹⁵**

Kantronics

2-meter transmitter kit Crystal controlled, over 1-watt output, ideally suited for GPS/APRS applications. Requires 12V DC @ 300mA. Compatible with Kantronics' KPC-3, KPC-3 Plus, KPC-9612, KPC-9612 Plus, KAM, KAM Plus, and KAM '98 TNC (modems). Kit includes: a two-sided (3 1/2" x 5") printed circuit board, DB-9 board mount connector, assembly/application manual, schematic, a 144.390 MHz crystal, and necessary parts to complete the board. It does not include a case, external male DB-9 connector or cabling... (Model K-1) **\$79⁹⁵**



Earthmate™ GPS Receiver for Laptop PC - \$159⁹⁵

The new GPS Receiver from DeLorme features a slim design, the latest GPS chip technology from Rockwell, enhanced performance, and award-winning Street Atlas USA 6.0 software*. Connect to laptops and Windows® CE or 3Com® Palm Computing handhelds. Use the new Solus™ PRO handheld mapping and routing application available separately from DeLorme.

***Street Atlas USA® 6.0** is the latest version of America's most detailed street-level mapping software includes one million new streets, address-to address routing, enhanced GPS features including GPS voice navigation, expanded exit service information, and compatibility with Windows®, CE and 3Com® Computing handheld computers. Lightning-fast search by individual street address, placename, area code and exchange, Zip code or lat/long. Create a sharp, detailed Travel Plan with your stops, driving time, and more. Connect to online weather, construction, and other useful travel information.

(Included with the Earthmate™ GPS Receiver)



TOPO USA™ CD-Rom - \$99⁹⁵

From the maker of Street Atlas USA - now hikers, bikers and outdoor enthusiasts can preview topographic terrain in all 50 states and plan the perfect outdoor adventure. Profile hikes and backroad trips for elevation, distance and degree of difficulty using the cross-sectional view. Select 3-D or 2-D views. Create on-road and off-road routes. Print detailed color topographic maps. Works with the DeLorme GPS Receiver, 3Com®, Palm Computing® and popular Windows® CE handheld computers



OREGON SCIENTIFIC



All Hazards Weather Radios

Monitors 24-hour weather forecasts and alerts • Scans/tunes all NOAA weather channels • Monitors the U.S. emergency alert system with automatic activation Dual LED power/alert indicator • Digital clock & alarm w/snooze

WR-8800 Pocket-sized • Ambient temperature display • Freeze alert audible/visual warning LCD screen with backlighting • Water-resistant case with compass • Belt clip and built-in desktop stand with power supply • Uses 3 "AA" batteries (not included) • 2 1/2" w x 1 1/4" d x 6 1/2" h, 8 oz..... **\$59⁹⁵**



WR-3300 Desktop/Bedside • Operates on 3 "C" batteries (not included) or with included AC power adapter • Large digital clock LCD • Wall mount or desktop • 5 1/4" x 4 1/4" x 2 1/4" h, 6 oz..... **\$49⁹⁵**

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DAVIS

Weather Stations

Gives Wind Direction & Speed, Temperature, Rain & Barometric Trend, Humidity, Dew Point, Alarms. Download and Graph Data on your PC - remote with Modem Interface. Central Junction Box for Easy Hook-up, Modular Design. Perfect for NOAA Weather Monitoring Stations.

Model 7440 Weather Monitor II

Top-of-the-line personal weather station combines all weather monitoring function & 12 or 24 hour clock w/date, into one package. Shows them on an easy-to-read, back lit, 1 1/2" x 4 3/4" LCD display. **Temperature:** Indoor, from 32°F-140°F **Wind:** Wind direction in 1° or 10° increments • Speeds to 175 mph • High wind speed • Wind chill to -134°F • Low wind chill **Barometer:** Barometric pressure (w/memory recall) **Trend arrow Humidity:** Inside humidity 10%-90% (outside opt.) • High & low humidity **Alarms:** Temperature, wind speed, wind chill, humidity, & time. Barometric trend alarm for change >.02, .04, or .06 inches of mercury in an hour **Other Features:** Compact, 5 1/2"x5 1/2"x3" • Scans selected func. • AC oper. w/batt. back-up • Use on desk, shelf or wall ... **\$349⁹⁵**

Model 7859 External Temperature & Humidity Sensor for the 7440; measure outside humidity, dew point & temperature. Comes with 40' cable **\$109⁹⁵**

Model 7425 Weather Wizard III Monitor both indoor and outdoor weather conditions at the touch of a button on the 1 1/2" x 4 3/4" LCD display. With the optional Rain Collector, measure daily and accumulated rainfall. Optional WeatherLink software will process and store weather data through an IBM compatible PC or Macintosh.

With anemometer, external temperature sensor, junction box, cables & AC adapter.

Temperature: Indoor, 32°F to 140°F • Outdoor, -50°F to 140°F • High and low temperature **Wind:** Direction in 1° or 10° increments • Speeds to 175 mph • High wind speed • Wind chill to -134°F • Low wind chill **Alarms:** Temperature • Wind speed • Wind chill **Time.** Other: Compact, just 5 1/2" x 5 1/2" x 3" • Scans selected functions • Metric or U.S. units • AC operation with back-up • Desk, shelf or wall mount..... **\$169⁹⁵**

Model 7415 Weather Wizard II-S

Like Weather Wizard III, but does not show wind direction, and the LCD display is smaller **\$129⁹⁵**

Model 7852 Rain Collector II for 7440, 7425 & 7415; read both daily & accumulated rainfall in 0.01" increments. Comes with 40ft cable **\$69⁹⁵**

Model 7400 Perception II

Monitors indoor climate, looks similar to Weather Wizard III. **Functions:** Temperature 32°F-140°F High/low temperature • Barometric pressure w/memory recall • Humidity • Highs & lows recorded with time & date • **Alarms:** Temperature, humidity, time, barometric change >.02, .04, or .06 inches of Hg/hr • 12/24 hr clock w/date • Backlit display **\$129⁹⁵**

40 ft. Extension Cables

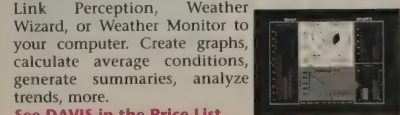
Model 7876 4-conductor, for anemometer, ext. temperature sensor, rain collector, or WeatherLink. **\$18⁹⁵**

Model 7878 6-conductor, for use with the external temperature and humidity Sensors, only..... **\$22⁹⁵**

Model 0281 Wind Wizard™

Handheld unit accurately measures wind speed from 0-60 MPH. No batteries required..... **\$46⁹⁵**

See DAVIS in the Price List



MIDLAND

74-109

WEATHER MAX PLUS Weather/All Hazard VHF Radio

Around-the-clock, up-to-the-minute weather and "hazardous conditions" information

Equipped with all 7 N.O.A.A. channels in the 162 MHz range for max. reception of local weather reports & bulletins for hazardous conditions (i.e., fire, toxic spills, earthquakes, radiation leaks, etc.)

In the event of severe weather or any type of hazardous situation, a warning signal is broadcast by N.O.A.A. & the radio's "alert" is automatically activated - sounding a 90 decibel siren, a voice warning or flashing a red LED alert. There is also accessory jack for keying add-on external alert devices such as strobe lights, pillow vibrators, buzzers, etc.

Plugs into a standard 120 VAC outlet. Built-in jack permits powering from any 12 VDC vehicle. With its 9V batt. backup system, it operates during power outages or outdoors. 1 1/2" h x 6 1/2" w x 4 1/2" d **\$59⁹⁵**



maxon
SYSTEMS
Weather Monitor

WX-70 Weather Monitor • Receive up-to-the-minute National Weather Service broadcasts of your local weather conditions for the United States, Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands. Covers all seven N.O.A.A. frequencies: 162.550, 162.400, 162.425, 162.475, 162.450, 162.500, and 162.525 MHz. Three different severe weather "Alert" warning modes: "Voice", 10 Second Siren; or Flashing LED. Supplied 110V AC adapter, uses a 9V battery for back-up power in the event of an electrical outage. 5 1/2" w x 4 1/2" d x 1 1/2" h, 13 oz. **\$39⁹⁵**

Family Radio Service

• No test, fee or license required • No cellular fees/time limits • Clear audio quality • Auto squelch reduces unwanted noise • Up to a 2 mile range - depends on terrain

vertex

YAESU

VXF-10 • 500mw • Coded squelch - private listening • Weather rx • Uses 3" AA" batt. • 4 1/2" h x 2 1/2" w x 1 1/2" d **\$119⁹⁵**

KENWOOD

UBZ-LF14 • 300mw • Coded squelch for private listening • Call tone paging Uses three "AA" batteries • 4" h x 2 1/2" w x 1 1/2" d **\$119⁹⁵**

MIDLAND

75-510 • 500mw • Coded squelch 4 "AA" Nicad batt. & wall charger incl. • 4 1/2" h x 2 1/2" w x 1 1/2" d..... **SPECIAL \$99⁹⁵**

CoBra

FRS-200 • Up/down channel and volume buttons • Lighted LCD display 4 1/2" h x 1 1/2" w x 1 1/2" d **SPECIAL \$99⁹⁵**

ICOM

IC-4008A • 500mw • Coded squelch 4" h x 2 1/2" w x 1" d **\$119⁹⁵**

ALINCO

DJ-S46 • 300mw • Scans • Auto off Incl. 3 NiCad "AA" batteries and charger • 4" h x 2 1/2" w x 1 1/2" d..... **\$119⁹⁵**

maxon Personal Communicators
SYSTEMS

Low Power, 1/4 mile average range • Dual conversion superheterodyne receiver provides crisp, clear voice transmission • Compatible use for group communications • Push-to-talk (PTT) or Voice activated (VOX) lets you talk-to-transmit • No license required

CHANNELS: A - 49.830 MHz; B - 49.845 MHz; C - 49.860 MHz; D - 49.875 MHz; E - 49.890 MHz

MX-49SX A single-channel unit featuring a lightweight adjustable headset with retractable whip antenna and boom-microphone with windscreens. LED power indicator, battery charger jack. Range up to 1/4-mile, average. Uses two "AA" alkaline or rechargeable nicad batteries. 5" w x 2 1/2" h x 1" d, 9 oz. Specify channel A, B or E **\$29⁹⁵**

MX-49FX 5 selectable channels (A, B, C, D & E). The unique earphone & microphone picks up voice vibrations from the ear canal for the transmit, audio and also provides received audio. Will not interfere with helmets.

Built-in antenna gives up to 1/8-mile range, average. Remote PTT button & channel selector. Uses three "AA" batteries. 5 1/2" w x 3" h x 1" d 6 oz. **\$49⁹⁵**

MX-49HX 5 selectable channels (A, B, C, D & E). Great for motorcycling, snowmobiling, etc. The helmet adaptable headset has a whip antenna and boom microphone with windscreens. VOX or PTT with on-unit or remote switch. Front mounted OFF/ON, volume, VOX sensitivity & channel selector. Jacks for optional passenger intercom headset. Uses three "AA" batteries. 5 1/2" w x 3" h x 1" d, 6 1/2 oz. **\$49⁹⁵**



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PROCOM

Low Power
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Handhelds

Ideal for
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Features Include: 10 synthesized programmable channels • Low/Med/High transmit power, SW full output • Range 1 to 3 miles • Channel LCD digital readout • Channel scan w/channel lockout • Rechargeable nicad battery, AC charger, flexible antenna • Jacks for AC charger, earphone, external speaker/microphone, and external antenna with BNC connector • Optional programmable CTCSS tone squelch • F.C.C. license application included • 4 1/2" h x 2 1/2" w x 1 1/2" d, 15 oz

M-510 VHF model - programmable from 144 to 174MHz **\$269⁹⁵**

MU-510 VHF model - programmable from 144 to 174MHz **\$299⁹⁵**

M-54 Similar features as models above. SW with four channels. Comes with one channel installed for 151.625MHz. 7" h x 2 1/2" w x 1 1/2" d, 1 lb **\$199⁹⁵**

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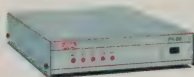
HAL COMMUNICATIONS CORP.

P-38 Multi-mode HF Modem

A full-size 13 $\frac{1}{2}$ " DSP card for all AT compatible PCs. Provides the best all-around performance on CLOVER, PACTOR, AMTOR and RTTY. Does not require the use of Comm ports or IRQ's. Operating software for your PC is included. Latest updates are available through the HAL Techline and the Internet. Third party software, such as EXPRESS, RAGCHEW, WFB is available. One year warranty... **\$295⁹⁵**

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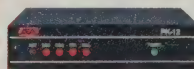
HAL TECHLINE: 217-367-5547
www.halcomm.com



PK-12 1200 bps VHF/UHF TNC

The ideal unit for getting started in Digital Communications.

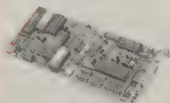
1200 bps, VHF Packet ready; Gateway as a Node; PC PakRatt Lite™ Control software included; APRS™ software included; APRS Adapter Cable available; AEA Host mode; Advanced command set; Identify TCP/IP, TheNet and NetRom; GPS firmware and commands; Stand alone tracking; External TX adjustment. Perfect for base station, loaded with features for mobile. 12V DC, or 9V battery. 5 $\frac{1}{2}$ "w x 5 $\frac{1}{2}$ "d x 1 $\frac{1}{2}$ "h, 12 oz **\$99⁹⁵**



PK-96 9600/1200 packet TNC

A plug-in and go TNC, loaded with

features. 9600/1200 bps Packet Ready; GPS firmware standard; Remotely programmable GPS commands; Stand Alone Tracking; Hardware HDLC for accuracy; True DCD to hear weak signals; Gateway as a Node; TheNet X-IJ Node firmware option available; Full MailDrop facility; PC PakRatt Lite™ terminal control software and APRS™ software included; AEA Host mode; Advanced command set; Identify TCP/IP, TheNet & NetRom; Separate external TX for 9600/1200 bps adjustments; External reset. Windows™ and Macintosh™ program available. Requires 12V DC. 6 $\frac{1}{2}$ "w x 7 $\frac{1}{2}$ "d x 1 $\frac{1}{2}$ "h, 1 $\frac{1}{2}$ lbs. With 32K RAM (18K Mailbox).....**\$169⁹⁵** or 128K RAM (100K) ... **\$199⁹⁵**



PCB-88 A full-featured, 1200 bps, IBM compatible, HF/VHF packet controller computer board. Plug it into any 8 or 16-bit expansion slot in your XT, AT or compatible **PC CLOSEOUT \$99⁹⁵**



IDR-96 Integrated 440MHz 9600 bps Data Radio. Features PK-96 TNC technology and a 5W, crystal controlled radio operating on 441.05MHz. Simple operation, no tuning! Full featured mailbox; Gateway node operation; advanced GPS; Identification of TCP/IP, TheNet; and NetROM stations and much more! PC PakRatt Lite™ & APRS™ software included. 12VDC **CLOSEOUT \$349⁹⁵**

Kantronics
www.kantronics.com

Multimode Data Controllers



KPC-3 Plus/128k • \$149⁹⁵

- 1200 bps – Now with more features
- Packet, GPS/APRS, Host, KISS and WEFAK modes, use with EMWIN
- Personal Mailbox (PBBS) now supports multiple calls
- Remote access, sensing and control with two A/D and two control lines
- PBS 100k, expandable with optional 512k RAM

KPC-9612 Plus/128k • \$289⁹⁵

- 1200 port AND second port of 4800–38,400 bps
- Most modes/capabilities of the KPC-3 Plus and POC-SAG (paging)
- Unique design allows the addition of another port, high or low speed
- Remote access, sensing and control capability
- Telemetry transmission capability

KAM-98 • \$399⁹⁵

- **Single Port** multimode TNC for HF and VHF use
- All the modes of KAM Plus with addition of A/D inputs/TTL outputs
- HC11 for more processing power to accommodate future upgrades
- Wider range of speeds; use 1200 bps packet on 10M

KAM Plus • SPECIAL \$319⁹⁵

- Dual port VHF/HF (1200/≤300 bps) multimode TNC
- Packet, GPS/APRS, Host, KISS, WEFAK, CW, RTTY, AMTOR, PACTOR, G-TOR, TOR, and Free Signal Detection for HF e-mail
- 100k personal mailbox standard, expandable with optional 512k RAM
- Remote access capability
- NEWUSER mode and on-line help

PacComm Packet Radio Systems, Inc. www.paccomm.com

PicoPacket Miniature TNC Z-181 high integration MPU with one megabyte address space • Online help • Personal message system • APRS • Terminal programs for DOS and Windows included • Open squelch DCD circuit included • Optional internal GPS receiver & Slide-on battery pack option • Slide-on battery pack option 1" h x 2 $\frac{1}{2}$ " w x 3 $\frac{1}{2}$ " d • Standard model with 128K RAM **\$149⁹⁵**

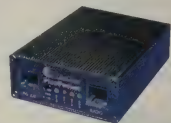
PicoPacket Dual 128K Dual Serial Port model – adds hardware clock and second serial port for GPS or weather station to the standard model..... **\$199⁹⁵**

Tiny-2 MK-2 Multi-purpose Basic TNC. 32K RAM • TNC-2 EPROM compatible WABDED host mode • KISS mode for satellite and TCP/IP Telemetry via RS-232 or TTL port • Disconnect header (will accept any TNC compatible model) Packet communication for a weather node • 45ma. draw • 5" h x 7" d 1 $\frac{1}{2}$ " h **\$149⁹⁵**

Tiny-2MK-2/GPS Tracker Basically the Tiny-II with a built-in GPS unit. Supplied with a small magnetic-mount Trimble GPS antenna **\$499⁹⁵**

Spirit-2 High Performance Packet Controller Designed to be configurable by setting jumpers and installing optional logic devices to support various tasks without performance compromise **\$239⁹⁵**

HandiPacket Packet controller. Ideal for portable or mobile operation • Loaded with features • Built-in 10-hour battery pack • 1.28" h x 2.55" w x 4.15" d ... **\$229⁹⁵**



MFJ ENTERPRISES, INC. www.mfjenterprises.com



MFJ-1278B Multi-mode Data Controller

10 modes: PACTOR, 16-level FAX, Color, SSTV, PACKET, AMTOR, RTTY, ASCII, CW Navtex and Memory Keyer. Enhanced Mailbox, 32K RAM, 16-gray level modem, 20 LED tune indicator, Auto Signal Analysis, MARS mode, sidetone amplifier, internal modem header, 10 programmable message buffers, packet connect bell, dual radio ports, "Has Mail" LED, KISS interface, Host mode, Threshold control, RS-232/TTL ports, 12 VDC. 9 $\frac{1}{2}$ "w x 9 $\frac{1}{2}$ "d x 1 $\frac{1}{2}$ "h **\$269⁹⁵**

MFJ-1278B/DSP The 1278B w/DSP filter **\$349⁹⁵**

MFJ-1278BT Same as MFJ-1278B except Turbo version, includes a fast 2400 baud modem **\$299⁹⁵**

MFJ-780 DSP Board. Plug-in "brick wall" DSP data filter for MFJ-1278 or MFJ-1278B **\$89⁹⁵**

MFJ-1270C TAPR TNC-2 Clone

Interfaces computer with RS-232 serial port and terminal program for VHF/UHF, OSCAR and other non-FM packet. Switchable HF/VHF modems. EasyMail™ personal mailbox, WEFAK. KISS interface for TCP/IP, 256K EPROM & 32K RAM. TTL serial port, battery back-up. AX.25/Level 2-V2 software, hardware HDLC-full duplex, true data carrier detect for HF, multiple connects. Interface cable, serial port connector and AC adapter. 12 VDC. 9 $\frac{1}{2}$ " w x 7 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " **\$109⁹⁵**

MFJ-1270CT Has all features of the 1270C plus built-in fast 2400 baud modem **\$139⁹⁵**

MFJ-1270CQ Has all features of the 1270C, plus built-in 9600 baud G3RUH compatible modem **\$219⁹⁵**

MFJ-2400 A 2400 baud modem, operates 300, 1200 and 2400 baud packet. For any radio **\$29⁹⁵**

MFJ-9600B A G3RUH compatible 9600 baud modem. Not all radios compatible with 9600 baud. Plus MFJ TNCs for easy installation **\$99⁹⁵**

MFJ-781 DSP for all TNCs. Separate unit gives your TNC (Kantronics, etc) Digital Signal Processing power **\$119⁹⁵**

MFJ-1272B/M TNC

Switch Pushbutton selection for voice or digital. Specify radio and TNC connection **\$39⁹⁵**



MFJ-8621 2 meter Packet Data Radio

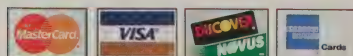
High-performance through 9600 baud. Plug in the TNC cable*, your antenna and power – you're ready for packet. Crystal control on 145.01 MHz, 5W output. Requires 12 VDC @ 1A. 5 $\frac{1}{2}$ " w x 5 $\frac{1}{2}$ " d x 1 $\frac{1}{2}$ " h. **\$109⁹⁵**

MFJ-8631 220MHz Packet Data Radio Same as as 8621, but 223.700MHz and 3W output **\$139⁹⁵**

MFJ-8621X2 Dedicated VHF Data Radio for APRS Automatic Packet Reporting System transceiver. Ready to go on 144.39 MHz **\$129⁹⁵**

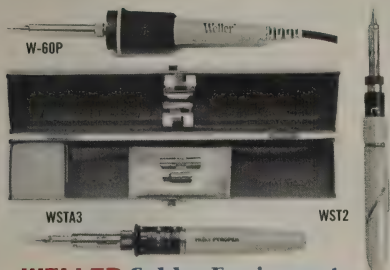
*See Price list for pre-wired 8621-to-TNC cables.

Crystals for other packet channels may be ordered from MFJ by calling 1-800-647-1800.



We accept I.M.P.A.C.® Government Credit Cards

See the Price List under MFJ for packet Software and Accessories for these products



WELLER Solder Equipment

W-60P 60-W Pencil-type Soldering Iron For most circuit work. Supplied with 1/16" 700°F screw-driver tip. 7 1/2" long, 2 1/2 oz., 6 ft. cord, 120V..... **\$61⁹⁵**

WP-25 25W Pencil-type Soldering Iron For work on delicate electronic circuits. 750°F tip temperature. 7 1/2" long, 1 1/2 oz., 4 ft. cord, 120V AC..... **\$32⁹⁵**

WSTA3 Pyrophen® Butane Soldering Iron Lightweight and completely portable. Operates for up to three hours on a charge of regular cigarette lighter butane. Soldering temperature control is adjustable from 392° to 932°F, with a very fast heat-up time. It's ready to solder in just 30-seconds! Supplied with tips for soldering, hot air (1202°F), and brazing..... **\$99⁹⁵**

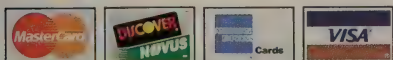
WST2 Pyrophen® Jr. A portable mini butane powered soldering iron. Recharges in seconds from a regular cigarette lighter butane container. The soldering temperature is adjustable from 392° to 842°F. Also, hot blow feature (806°F) and torch feature (2372°F). Has handy pocket clip..... **\$85⁹⁵**

7200PK Soldering Gun Compact, lightweight, 75 watts for bigger work. Handles connectors and almost any other heavier soldering job. The flat, self-supporting back acts as a convenient rest when not in use. With Carrying case, extra tip and solder. 120VAC... **\$26⁹⁵**

WTCPT Controlled Output Soldering Station This pencil iron is safe for soldering. ICs. Power unit with unitized on-off rocker switch with indicator light. Storage tray holds extra tip and tip cleaning sponge..... **\$119⁹⁵**

EC-1002-1 Soldering Station Compact. Soldering pencil stand connects to right or left side of unit. Variable temperature, indicator light, self feeding reservoir with cleaning sponge. Tray stores extra temperature sensing tips. **\$199⁹⁵**

WAHC 7740 Cordless Soldering Iron Provides tip performance up to 50 watts and over 700°. Contains a premium nicad rechargeable battery for high-rate charging; a partially discharged unit will return to full capacity within 1 to 2 hours, with a complete recharge in 3 to 4 1/2 hours. Replaceable battery and work-light. Comes with recharging stand, fine and heavy tips..... **\$46⁹⁵**



NC-101 Encoder

Micro-miniature CTCSS Encoder, field tunable to any of the CTCSS tone frequencies between 67Hz to 254 Hz. 5 to 15VDC. 0.60"W x 0.80"L x 0.15"H **NorFax™ #5040 \$19⁹⁵**

NC-104 Programmable Encoder

Sub-miniature, field programmable CTCSS Encoder unit for limited space. Provides the standard 37 EIA CTCSS tones + 69.37, 97.4 and 205.5 Hz. 7 to 24VDC. 0.625"W x 0.80"L x 0.170"D **NorFax™ #5150 \$24⁹⁵**

NC-106 Programmable CTCSS Encoder/Decoder

A sub-miniature crystal-controlled digital unit. Field programmable with dip switches providing any one of the standard 37 CTCSS tones + 97.4Hz. 6-24VDC. 0.85"W x 1.35"L x 0.28"H **NorFax™ #5230 \$54⁹⁵**

NC-401 Touch-Tone® Decoder

A unique micro-miniature unit combining two distinct multi-addressable decoders for control of remote or local applications. Decodes all 16 DTMF characters with an address length of 1-14 characters and features EPROM memory for storage of both primary and secondary codes, input/output functions, dead-beat disable and user outputs, plus default reset. Programming easily performed by means of a conventional DTMF encoder. 6-24V DC. 0.80"W x 1.37"L x 0.23"H. **NorFax™ #5545 \$59⁹⁵**

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CD-2 Communications Decoder Unit

When mobile, the CSI CD-2 makes it easy for you to use open repeaters & autopatches because it decodes and displays any CTCSS, DCS or DTMF codes other amateurs are using on the channel. When at the base, the RS-232 port exports all decoded CTCSS/DCS or DTMF data to your PC allowing use of CD-2P software. Maintains a history of CTCSS/DCS/DTMF data from the CD-2 occurring on the channel being monitored, creates usage graphs, etc. PC/DOS based. 12 - 15 VDC. 4.9"W x 4.5"D x 1.9"H, 1 lb.. **\$249⁹⁵**

CD-2P PC Program for CD-2..... **\$95⁹⁵**

For additional information you may contact CSI at:
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SS-64 Programmable CTCSS Encoder Super small for easy installation in most HTs. Standard with 32 EIA tones between 67 and 203.5 Hz. Individual tones are dip-switch selectable 0.66" x 1.08" x 0.21", requires 6-15 VDC..... **\$28⁹⁵**

TS-64DS Field programmable CTCSS Encoder-Decoder DIP switch programmable for 64 EIA tones from 33-254.1Hz. 1/2" x 1 1/4" x 1/8", 6-25 VDC... **\$57⁹⁵**

DTD-1 DTMF Decoder Small, high quality and low cost. Decodes any one of 5,040 4-digit codes to provide a latched or momentary open collector output for single function operations. 1 1/4" x 2" x 0.4", requires 6-12 VDC..... **\$49⁹⁵**

TE-32 Multi-tone Encoder Provides direct access from a front dial rotary switch to all EIA CTCSS tones from 67.0 to 203.5Hz, allowing users to access various repeaters Great for mobile or test bench. 5 1/4" x 3 3/4" x 1 1/4", 6-30 VDC... **\$49⁹⁵**

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ID-8 Multi-Featured Automatic Morse ID'er Programmable via 12-button keypad. Eight changeable messages, 200 characters total. CW speed: 1-99 wpm; ID interval timing: 1-99 minutes; ID hold-off timing: 0 to 99 seconds; CW tone: 100-3000Hz. Board: 1.85" x 1.12" x 0.35"..... **\$69⁹⁵**

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K-Series option: features a built-in keying circuit & relay to automatically key a transmitter or other system. When any key is depressed, a relay closes for 0-3 seconds, time is adjustable with a trimpot.

PK-1K \$78⁹⁵ - PK-2K \$83⁹⁵

M-Series option: a special encoder package for mounting any PK-1/K, PK-2/K PIPO encoder to surfaces that are inaccessible from the rear such as walls, mobile dashboards, panels, etc. Consists of a frame which secures to the mounting surface with the encoder press-fitting into the frame.

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AT-201 TWO METER HT

AT-400 440 MHz HT



AT-201: Tx: 144-148 • Rx: 130-179 MHz
• MARS and CAP capable (permits are required)
• 5-watts output (with 12 VDC) • 40 memory channels store any offset or tone • CTCSS encode and decode included • programmable band and memory scan modes • DTMF paging included • dual frequency watch • auto-repeater offset • user selectable frequency or channel display modes • backlit display and keypad • 2.5 and 5 watt versions available • Size: 4.25" (H) x 2" (W) x 1.3" (D) excluding battery pack

AT-400: Tx: 430-450 • Rx: 400-470 MHz
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Radio Products

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Transmit Range: 222-225 MHz • Receive Range: 216-228 MHz • 5-watts output with included NiCad battery pack! • MARS and CAP capable (permits are required) • built-in CTCSS encode and decode • 40 memory channels store any tone or offset • direct frequency entry using 16 button keypad • frequency or channel display modes • PC programmable (with optional software) or cable cloneable. • Palm-sized! World's Smallest 1.35-Meter handheld! Size: 4.25" (H) x 2" (W) x 0.75" (D) excluding battery pack!

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Transmit Range: 50-54 MHz • Receive Range: 40-54 MHz • 5-watts output with included NiCad battery pack! • MARS and CAP capable (permits are required) • built-in CTCSS encode and decode • 40 memory channels store any tone or offset • direct frequency entry using 16 button keypad • frequency or channel display modes • PC programmable (with optional software) or cable cloneable. • Palm-sized! World's Smallest 1.35-Meter handheld! Size: 4.25" (H) x 2" (W) x 0.75" (D) excluding battery pack!

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DJ-280T 222 MHz HT

NEW! Up to 4 watts output, 10 memories (expandable to 50 or 200), illuminated display, accepts 13.8 VDC input with optional EDH-12. DJ-180T (2m model) and DJ-480T (70cm model) also available.



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"Credit card" size, internal speaker, 300 mw output, 50 memories, CTCSS encode + decode, AM Airband RX, soft case, lithium-ion battery, desk charger included!



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"Pager Size", 340 mw output, 21 memories, uses AA, NiCd or external power, Easy to operate and program, great TX and RX audio, fits in pocket or purse!



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50 watts output, 100 memories, Air Band and UHF (440 ~ 450 MHz) RX, Channel Scope™ display, 2 VFOs, auto dial memories, 9600 packet port, H/M/L output, DR-150TQ includes CTCSS decode.



DR-140T, DR-140TQ 2m Mobile/Base

50/5 watts output, 51 memories, alphanumeric display, AM air band receive DR-140TQ includes CTCSS decode

DR-610T, DR-610TQ 2m/440 Mobile/Base

50 watts VHF, 35 watts UHF, Channel Scope™ display, 120 memories, detachable face, V/U, V/V, U/U, U/V, RF attenuator, two VFOs, H/M/L output, AM air band receive, internal duplexer, 9600 packet port, DR-610TQ includes CTCSS decode



DR-605T, DR-605TQ 2m/440 Mobile/Base

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160m ~ 6m Amateur Band TX in all modes, general coverage RX 150 KHz ~ 30 MHz and 50 ~ 54 MHz, 2 VFOs, 100 memories, removable face for remote mounting, speech compressor, SSB, CW and AM narrow filters, full, semi or automatic break-in, multi-function control, RIT, TXIT, easy split operation, RF gain, CTCSS for 10 and 6m repeaters. Both models feature 100w output on HF, DX-70TH has 100 w output on 6m, DX-70T has 10w output on 6m. Be sure to ask about the optional EDX-1 and EDX-2 antenna tuners.

DX-77T HF Desktop Transceiver

160 ~ 10 m Amateur Band TX in all modes, general coverage RX 500 KHz ~ 30 MHz, 2 VFOs, internal keyer (6 ~ 50 wpm), 100 memories, 13.8 VDC input, optional computer control capability, CTCSS encoder (front panel programmable), RIT, easy split operation, speech compressor, selectable AGC, large front panel speaker. Compatible with the optional EDX-1 or EDX-2 antenna tuner.



EDX-2 Automatic Antenna Tuner

Connects directly to any Alinco DX-70 or DX-77 model, quickly tunes a wire or mobile whip antenna at the touch of a button. Perfect for mobile, portable, base or marine HF operations. Can be mounted outdoors.



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- Optional MA-27 adapter allows Mobile Operation
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- Accessories Include: Flexible Antenna, Ni-Cad Battery Pack, Power Adapter, Battery Charger, Belt Clip and Wrist Strap

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ICOM FunMobile & Kantronics Digital Seminar



On Saturday, July 25th, the ICOM FunMobile stopped for a day at the AES Milwaukee store. This rolling Ham shack is nearly 30 feet long and loaded with the latest in ICOM Ham radio, Aviation, Marine and Land-mobile equipment.

Inside, there were several operating positions available which allowed visitors to experience the very latest in technology.

All of the display gear was fully operational and working off an on-board power system into numerous antenna systems installed on the top of the vehicle. Many took the opportunity to sit down and make contacts on HF, VHF, UHF and via satellite, right from our parking lot! There was the usual coffee, soda and popcorn provided and several door prizes, including an ICOM T2A 2-meter handheld.



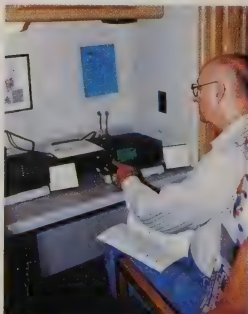
In conjunction with the ICOM FunMobile visit, Phil Anderson, WØXI, President of Kantronics Co., Inc., presented a 3-session digital seminar at our Milwaukee store. This was Phil's fourth digital seminar at Milwaukee and seventh overall for AES, having done one in each of the Wickliffe, Orlando and Las Vegas stores.

Phil lectured on GPS systems (APRS™), trackers, and packet radio. He also talked about HF radio ship-to-shore internet e-mail systems.

And, something new – a "hands-on" session! Phil brought along a quantity of his new 2-meter transmitter kits which he led participants in assembling and testing. They were designed to be compatible with Kantronics TNCs for GPS/APRS applications. The kits drew a lot of interest and are now available through AES.



Plenty of operating positions available!



Phil demonstrates using a 500 watt soldering iron on a PC board

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MFJ-9406X Full CW/SSB coverage: VFO tunes 50.0 to 50.3MHz, covers CW, propagation beacons, SSB. Smooth reduction-drive analog VFO and fine-tune control makes tuning signals easy. Only 2 1/2" h x 6 1/2" w x 6" d. Optional CW module and power supply.

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6 meter Accessories:

MFJ-416 CW module for 9406X, provides semi-QSK break-in and sidetone..... **\$39⁹⁵**

MFJ-4110 110V AC wall adapter transformer and voltage regulator for 9406X (13.6V DC out) **\$49⁹⁵**

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MFJ-1762 Lightweight 3-element 6-meter yagi. Gain: 6 dBd. F/B: 18 dB. Boom length: 6 ft. Weight: 2 lbs. Rated 300W PEP SSB **\$69⁹⁵**

MFJ-4114 Lightweight, portable 1/2-wave folded dipole antenna, assembled with feedline **\$69⁹⁵**

MFJ-1728B Mobile magnet mount antenna. Full 1/4-wave on 6M, 5/8-wave on 2M **\$24⁹⁵**

MFJ-1756 6-meter omni-directional low-angle DX vertical base station antenna **\$69⁹⁵**

MFJ-1736 6-meter J-Pole Travel antenna **\$24⁹⁵**

MIRAGE A-1015G 6-meter 150 Watt Amplifier. Ideal for 9406X and other 6 meter (1-15 watt) FM, SSB, or CW rigs. 10W input produces 150 W output. Requires 13.8V DC @ 18-22 amps **\$349⁹⁵**



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RP-1220 1240-1300MHz, 10W output **\$2849⁹⁵**

You may call us for more detailed information on these Icom and Yaesu Repeaters.



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- CTCSS encode/decode
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- 14-3/4" x 10-3/4" x 4-3/8"

VXR-5000VADC 2 meters, 12VDC @ 7A. **\$1199⁹⁵**

VXR-5000UCD 440 MHz, 12VDC @ 7A. **\$1199⁹⁵**

VXR-5000U/TC 440 MHz w/AC supply... **\$1399⁹⁵**



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TR-270
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Base/Mobile
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Major features: Dual receiver oper. with 2 VFOs per receiver & independent volume & squelch controls; High dynamic range front end; Frequency turning via tuning wheel, up/down buttons, or direct keypad entry; Multiple scan func; Pre-programmed operating parameters w/customizable settings; RS232C interface; 3 selectable power output levels; Switchable IF filters.

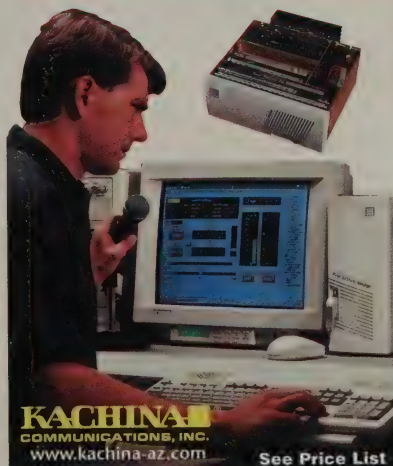
Total integration of FM voice, packet, satellite, and weather fax - ACARS data reception possible with the optional TNC270 and DEMOD270 (200 additional memories in weather satellite and satellite modes).

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Transmit range	142 to 150 MHz
Extended receiver range....	136 to 174 MHz & 420 to 470 MHz
Maximum power output	25W
Sensitivity	0.18µV/12dB SINAD
Audio output at 8Ω	2W
Power Requirements	15/230 VAC ±10% 13.8V DC @ 8A
Dimensions	4 1/4" h x 11" w x 13 1/2" d

TNC-270 Terminal node controller Plug-in controller card for the TR-270 transceiver. 1200/9600 bps. Easy operation, comes with PC PakRatt™ software for Windows® and PP Lite™ software for DOS..... **\$249⁹⁵**

DEMOM-270 TNC-270 accessory Provides demodulation of weather satellite transmissions, including NOAA APT, GOES and HF WEFAX (additional equipment may be required), and other facsimile signals; ACARS, Morse code and RTTY also possible **\$99⁹⁵**



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Covers 160 thru 10 meter amateur bands on transmit and from 0.1 to 30 MHz with its general coverage receiver. Power output is 100 watts SSB/CW and 25 watts AM. Built-in 5-80 WPM CW keyer. Totally PC controlled under Windows 3.1 or Windows 95 and loaded with computerized features: 16/24 bit IF DSP processing, 1 Hz DDS tuning; built-in test and frequency calibration, band sweep display; point and click tuning; on screen Smith chart; logging software.

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DJ-546T UHF Family Radio Service Transceiver

No license required!
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available too!



DM-340MVT DC Power Supply

30 amps nominal, 35 amps peak,
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HF + 6M + 2M • 100 Watts (HF + 6M), 20 watts (2M) • All Mode • Removable Front Panel*
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*Optional equipment required

IC-707

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Single Bander • Fun, Shirt Pocket Small and Easy to Use • Large Alphanumeric Display • Wide Receive Coverage, Including Air Band • 5 W @ 13.5 V (3 W Out of Box) • Air Band Receive • 80 Memory Channels (40 w/Alpha Display) • 2.3"(W), 4.3"(H), 1.1"(D), 10.9 oz

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6 Meter/2 Meter/440 MHz Tri Bander Handheld • Worlds Smallest! • Super Thin Profile/Lightweight Design • Up to 5 Watts Power on All Bands (13.5 V DC) • 4.5 Watts Out of Box with Supplied BP-200 Battery • One-Touch Band Switching • Ni-MH Powered! • RX (MHz): 50-54 (6 meters), 118 - 174 (2 meters), 400 - 470 (440 MHz) Broadcast FM and AM Receive (most TV stations, too) • Airband Receive • 123 Memory Channels with 10 Scan Edges and 1 Call for Each Band • MIL SPEC 810 C/D/E • Tone Squelch with Pocket Beep • Backlit Display with Timer • Built in Guide Function • JIS Grade 4 Water Resistance • Wall Charger Included • DTMF Encoder with 9 DTMF Memories • Handheld to Handheld Cloning Capability or PC Programming Capability** • 2.3 (W), 4.3 (H), 1.2 (D), 9.9 oz



MOBILES

IC-2100H



Optional Infrared Wireless Mic

The HM-90 infrared optional wireless mic works with the IC-2100H, IC-207H** and the more advanced IC-2710H. Enjoy cable-free operation on the GO!

2 Meter • 55/10/5 Watts (selectable) • TX 144-148 MHz • RX 136-174 MHz • 75 db/93 db IMD • 113 Memory Channels • Heavy Duty, One Piece, Die Cast Aluminum Chassis • MIL SPEC 810 C/D/E Shock/Vibration • Front Panel Programmable Alphanumeric Display • PC or Radio to Radio Cloning** • DTMF Microphone (HM-98S) • CTCSS Encode/Decode Standard - 50 Tone Frequencies • Independently Programmable Tx/Rx • Tone Scan • Auto Repeater with Busy Lockout • Priority Watch (3 types) • 5.5"(W) x 1.6"(H) x 7.1"(D), 2 lb 10 oz

IC-2710H



2M/440 MHz Advanced Dual Bander • 2M (50 W)/440 MHz (35 W) • Detachable Control Panel** • Fast Scanning • 220 Memory Channels • PC Programmable • CTCSS Encode (decode optional) • RF Attenuator • 8 DTMF Memory Switches • v/v, u/u Simultaneous RX • Built-In Duplexer • 3 Selectable Power Levels: 50 (35), 10, 5 • 5.5"(W), 1.6"(H), 8.4"(D), 3.1 lb

IC-207H



2M/440MHz Dual Bander • 2M (45 W)/440 MHz (35 W) • Super Compact Detachable Control Panel** with Big Keys, Big Knobs and a Big Display • Work One Band at a Time • 9600 Baud Ready • Wide Band RX (Includes Air Band) • CTCSS Encode/Decode • Very Affordable • 5.5"(W), 1.5"(H), 8.1"(D), 2.6 lb

BASE STATIONS



IC-821H

2M/440 MHz Advanced Satellite & Digital Base Station • All Modes • Easy to Use! • Continuous Adjustable Transmit Power • Sub Band Transmit • 9600 Full Compatibility Out of the Box • 160 Memories • Noise Blanker & IF Shift on Main & Sub Bands (independent main/sub RX) • Built-In Electronic Keyer • Satellite Tracking with Doppler Correction • Compact! 9.5"(W), 3.7"(H), 9.4"(D), 11.0 lb
"By far the easiest to use satellite radio on the market today. In less than 10 minutes after unpacking the 821H, I was on the air at 9600 baud with KO-23"
— Michael Wyrick, N4USI, AO-27
Control Operator

Solar Cycle 23 is here. Now's the best time to upgrade your license... or your shack. When you upgrade to General Class or higher, mail us a copy of your amateur radio license. **ICOM** **UPGRADE 1999** **HEAR comes the Sun** with ICOM

is giving away one IC-706MKII each month, between April 1998 and March 1999. For complete details, visit your AES dealer today.

©1998 ICOM America, Inc. The ICOM logo is a trademark of ICOM, Inc. *This device has not been approved by the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained. **Optional equipment required. *Reception guaranteed only on 2 meter ham band. All stated specifications are subject to change without notice or obligation. All ICOM radios significantly exceed FCC requirements limiting spurious emissions. VHF/UHF AES9991

ICOM
www.icomamerica.com



HEIL PRO-SET Boomset Headphones

A rugged, lightweight boomset designed for long wearing time during contests, etc. The headband has detents on each side for adjustment, and is fully padded for comfort. The vinyl earpads are also heavily padded, seal out noise, and are removable for washing. The flexible microphone boom adjusts to about any location and folds up for storage. Includes a HEIL HC-4 or HC-5 microphone cartridge (below)..... **\$131⁹⁵**

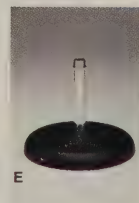
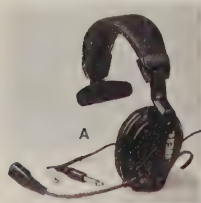
AD-1 Adapter Cables (D) for use with ICOM, KENWOOD, TEN-TEC or YAESU transceivers each **\$14⁹⁹**

HEIL PRO-MICRO Boomset Headphones

The Pro Micro is the newest addition to the Heil Pro line. It replaces the old BM-10 and BM-5 series headsets. It is simply a miniature version of the Pro Set. It's main

feature besides being smaller & lighter weight is that it does not cover the entire ear. Hams sometimes want to hear their surroundings. Using the Heil Pro-Micro can allow you to do that. Available with the HC-4 or HC-5 element (below)..**\$105⁹⁵**
AD-1 Adapter cables (D) for use with ICOM, KENWOOD, TEN-TEC or YAESU transceivers each **\$14⁹⁹**

info@heilsound.com



PRO 5 Boomset (A) Concerned about covering both ears? – the Pro 5 was created. Provides all of the same quality and performance as the Pro Set with out covering the right ear. Available with either the HC-4 or HC-5 element (below). Use AD-1 adapter (above), specify HC-4 or HC-5 **\$120⁹⁵**

HM-10 Microphone (B) A hand-held studio-style microphone with desk stand or boom mount options. Choice of HEIL cartridges. Operate PTT or VOX, it's designed to work with virtually any late model transceiver. When ordering specify HC-4 or HC-5 cartridge (below) **\$63⁹⁵**

HM-10 DUAL Microphone (C) The ultimate microphone. Versatile in that it has both HC-4 DX element and HC-5 Full Range microphone cartridges built-in – and switch selectable for varying conditions..... **\$112⁹⁵**

HM-10 CABLES (not pictured) Designed to work with any transmitter. When ordering specify your radio and the HM-10 will be shipped with the correct color coded cables. Specify 8-pin or modular and manufacturer (See price list for model numbers) **\$25⁹⁵**

TB-1 Table Base (E) For HM-10 series microphones. 6 inches high, heavy lb., 10 oz) cast metal base with non-skid cork feet. **\$19⁹⁵**

MA-1 Boom and Clamp Assembly (F) For HM-10 series microphones. The boom is adjustable from 6 to 24 inches and attaches to desk or shelf, or hangs from ceiling. Swivels a full 360° and places HM-10 or DUAL TEN microphone exactly where you want it. You can use the FS-1 footswitch for convenient hands-free PTT operation **\$49⁹⁵**

FS-1 Foot switch (G) Provides convenient foot-control of PTT function on any transmitter. Non-skid rubber pad on both top and bottom, supplied with 7 ft. cable and 1/4" phone plug. **\$26⁹⁵**

HEIL MICROPHONE CARTRIDGES

Most microphones today were designed for PA – not for SSB, with the frequency response needed for busting pile-ups, or providing maximum voice clarity. If you aren't satisfied with the "sound of your station", you can solve this problem by replacing the cartridge in your microphone with a Heil Key Element for a dramatic improvement. It's tiny in size, and easily replaces existing cartridges in most microphones.

HC-4 – The DX Dream Machine

The replacement microphone cartridge for Contest and DX operators. It's engineered with a high-pitched, pile-up busting frequency response of 500Hz to 3800Hz with a 10dB peak at 2000Hz, and a sharp 12dB per octave roll off at 500Hz. It provides your rig with excellent clarity and more punch for getting through the pile-ups. Impedance: 2000Ω @ 1000Hz – works well into low (500-600Ω) and medium (2k-5kΩ) impedance inputs. Cardioid shaped pick-up pattern. Size: 0.530" d x 0.850" w x 0.310" h **\$29⁹⁵**

HC-5 – The Key Element

The ideal replacement microphone cartridge for everyday Rag Chewing. Engineered with full range articulation and maximum voice clarity. Not mushy, bassy paging-type audio, but very clear, easy-to-understand SSB audio. Response: 350Hz to 4000Hz with a sharp roll-off under 300Hz and above 3100Hz with a peak at 2100Hz. Impedance: 2000Ω @ 1000Hz – works well into low (500-600Ω) and medium (2k-5kΩ) impedance inputs. Cardioid shaped pattern. Size: 0.530" d x 0.850" w x 0.310" h **\$29⁹⁵**

In-Line Microphone Preamplifier for use with ICOM Transceivers



Model HMP Provides 8 dB of overall gain and 4 dB equalization at 1500Hz to produce very articulated transmit audio from all ICOM transceivers – a dramatic improvement! An 8-pin plug is attached to the 6" cable coming from HMP and is mated to the ICOM pin out. Accepts the 8-pin plug from a Heil CC-1 and AD adapters. Operational 8V DC is derived from the microphone input of the ICOM while passing through the push-to-talk line. The **HMP-M** has a modular plug mate to the ICOM modular connector radios, such as the IC-706, 706MKII **HMP or HMP-M \$54⁹⁵**

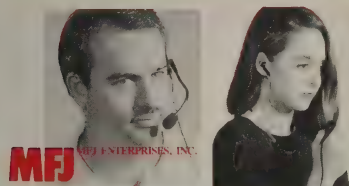
ASTATIC Microphones



10DA-L High-Z dynamic SSB microphone head. Controlled 300-3000Hz response provides high attenuation of the unwanted sideband and better copy through interference. 2 1/2" w x 1 1/2" h x 3/4" d, 17 oz. Black. Uses T-UG9 stand, below..... **\$69⁹⁹**

D-104L The original "super talk power" microphone head. High output and 300-7500Hz response with rising characteristics between 500 and 4000 Hz, provides maximum intelligibility. Shock proof cartridge with high-Z crystal element, metal sealed for protection. Solid machined brass parts, heavy mesh grille, all chrome plated. 3" diameter. x 1 1/2" d, 14 oz. Uses the T-UG9 stand, below..... **\$42⁹⁹**

T-UG9 Accepts D-104L and ODA-L microphone heads. Built-in adjustable preamp with output impedance, matches most transmitters. Side switch bar for PTT w/slide-up locking clamp. 8 3/8" without head, 5 1/2" dia. base. Chrome and grey, 6-wire coiled cable. Uses 9 Volt batt..... **\$52⁹⁹**



MFJ-2881 Deluxe Headset Microphone™ (left) Lightweight, comfortable. Superb transmit audio - picks up your voice even at a whisper. Superb earphone tonal quality and intelligibility. The foam covered microphone element is attached to the headset with a flexible rubber extension, which allows proper positioning of the microphone. The small PTT switch can hold or conveniently attached to your clothing. Six ft. of cord from headset to plug.

MFJ-2881 works with ICOM, Yaesu, Standard, ADI, Radio Shack and compatibles. MFJ-288K works with Kenwood and compatibles. **\$24⁹⁹**

MFJ-292 Featherweight™ Earphone/Microphone (right) An ear-plug earphone that fits comfortably in your ear. A tiny thumb size microphone with a push-to-talk switch with lapel/pocket clip is built into the cord. Its high quality dynamic earphone and electret microphone gives your handheld crystal clear audio on receive and transmit. Four ft. long cord.

MFJ-2921 works with Icom, Yaesu, Alinco, Standard, ADI and compatibles. MFJ-292K for Kenwood and compatibles. MFJ-292Y works with Yaesu FT-10R, FT-40R, FT-50R and VX-11R transceivers only..... **\$17⁹⁹**



NCG Light-weight boom microphone & headset combination for popular handheld radios. Conveniently folds-up for easy storage. Boom microphone pivots to allow left or right ear speaker position. Includes push-to-talk switch and 36" cord.

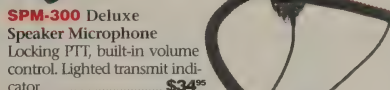
MP-28 Icom, Standard Yaesu, Alinco version **\$39⁹⁹**
MP-28K Kenwood **\$39⁹⁹**

PREMIER communications

Products for ADI, Icom & Yaesu



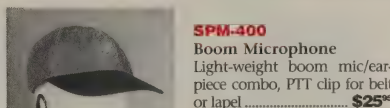
SPM-100
Speaker Microphone
Full-sized electret speaker mic.
Convenient revolving lapel clip..... **SPECIAL \$19⁹⁹**



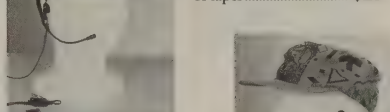
SPM-300 Deluxe
Speaker Microphone
Locking PTT, built-in volume control. Lighted transmit indicator..... **\$34⁹⁹**



SPM-200/SPM-200E
Lapel Microphones
Clips to your collar or lapel. Available with an earbud (SPM-200) or earhook (SPM-200E) **\$18⁹⁹ / \$21⁹⁹**



SPM-400
Boom Microphone
Light-weight boom mic/ear-piece combo, PTT clip for belt or lapel **\$25⁹⁹**



SPM-500
Throat Microphone
Picks up vocal vibrations directly from your neck. The perfect choice for high noise environments. Uses either a lapel or "fingertip" PTT **\$59⁹⁹**

KOSS Stereophones



QZ/99 (pictured) Passive noise reduction stereoheadphone with mono/stereo switch. 40-20,000 Hz. Coiled, single entry, 8 ft. cord with 3.5mm/6.4 mm plug. 15 oz. 102 dB SPL/1mW, 60 Ω **\$59⁹⁹**

GT/5 Portable stereoheadphone w/replaceable ear cushions. 20-20,000Hz. Straight, dual entry, 8' cord with 35mm/6.4 mm plug. 4.7 oz. 96dB SPL/1mW, 60Ω..... **\$29⁹⁹**

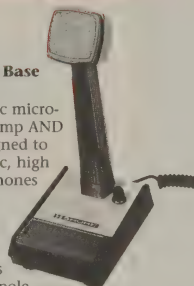
HD/33 Lightweight computer stereoheadphone with foam ear cushion design and volume control. 60-20,000 Hz. Straight, single entry, 4 ft. cord with 3.5mm/6.4mm plug. 3.4 oz. 91dB SPL/1mW, 32Ω **\$14⁹⁹**

SP/5 Sideswiping portable stereoheadphone in sport yellow color. 40-20,000 Hz. Straight, dual entry, 4' cord with 3.5 mm plug. 0.46 oz. 92 dB SPL/1mW 32 Ω **\$7⁹⁹**

SHURE

526T Series II SUPER PUNCH™ Transistorized Base Station Microphone

Adjustable height, dynamic microphone with a built-in preamp AND output level control. Designed to replace ceramic or dynamic, high or low impedance microphones supplied as original equipment w/most equipment. 200-6,000Hz frequency response provides optimum intelligibility. Comes with 6-wire cable & triple pole double-throw locking PTT switch for wide range of microphone to transceiver connection compatibilities. Includes 9V batt. for compatibility **\$119⁹⁹**



LOGSAT PRO Satellite Tracking Software

If it Orbits the Globe Logsat Can Track it!
Track hundreds of satellites in Dozens of Windows

- KANSAS CITY TRACKER support
- Complete multi-tasking - track satellites and print out satellite schedules while working on the DX cluster, etc.
- An unlimited number of satellite windows can be opened at the same time
- Voice Alarms when any satellite window becomes visible
- 5 different map projections, high or low resolution for 486DX2 and Pentium PC's or slower 386's
- 3D antenna radiation diagrams can be displayed
- Detailed, context sensitive, on line help
- Includes TSE - The Satellite Encyclopedia

Minimum Requirements - Windows® 3.1/95/NT compatible • Mouse or compatible pointing device • Standard keyboard • 286 processor • 4MB RAM • 15MB Hard Disk Space. **Optional:** PC Compatible Sound Card with Speakers • 486 with 32MB RAM for High Resolution Graphics • Kansas City Tracker Rotor Interface

AMATEUR ELECTRONIC SUPPLY
5710 W. GOOD HOPE ROAD.
MILWAUKEE, WISCONSIN 53223
(414) 358-0333

NO. 0000

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AUTHORIZED SIGNATURE _____

Perfect Gift for the Person with Everything!

SPM-100 Speaker Mic



- * Crystal clear sound quality on transmit and receive!
- * Electret condenser type microphone
- * Rugged cord
- * Adjustable microphone clip rotates 360 degrees
- * External earphone jack!

Models Available

SPM-100 for ADI, Icom, Standard, and Yaesu
SPM-101 for Kenwood
SPM-102 for Yaesu FT-50/VX IR
SPM-103 for Motorola GP-300
SPM-104 for Uniden

SPM-200/200E Lapel Mic

- * Tiny electret type microphone that clips right to your lapel or collar
- * Conveniently located Push-To-Talk
- * Light weight in-ear speaker
- * Also available with an adjustable rubber earhook which secures the earphone to your ear (SPM-200E series)

Models Available

SPM-200/200E for ADI, Icom, Standard, and Yaesu
SPM-201/201E for Kenwood
SPM-202/202E for Yaesu FT-50/VX IR
SPM-203/203E for Motorola GP-300
SPM-204/204E for Uniden



SPM-400 Mini Boom Mic



- * Lightweight boom mic and earpiece all in one
- * Has a convenient PTT clip for belt or lapel
- * Features a comfortable earhook to secure mic to your ear!
- * Adjusts to fit either right or left ear

Models Available

SPM-400 for ADI, Icom, Standard, and Yaesu
SPM-401 for Kenwood
SPM-402 for Yaesu FT-50/VX IR
SPM-403 for Motorola GP-300
SPM-404 for Uniden

SPM-500 Throat Mic

- * The right choice for high noise conditions
- * Direct vibration sensor provides excellent audio clarity
- * High background noise isolation
- * Key the mic with either the PTT for lapel or belt, or use the finger tip PTT

Models Available

SPM-500 for ADI, Icom, Standard, and Yaesu
SPM-501 for Kenwood
SPM-502 for Yaesu FT-50/VX IR
SPM-503 for Motorola GP-300
SPM-504 for Uniden



SPM-600 Speaker Mic

- * Rugged housing and cord stand up to heavy use
- * Large 1" internal speaker for maximum volume
- * Adjustable microphone clip rotates 360 degrees
- * Built in jack for an external earphone

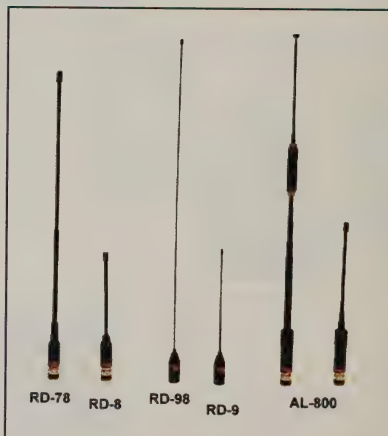
Models Available

SPM-600 for ADI, Icom, Standard, and Yaesu
SPM-601 for Kenwood
SPM-602 for Yaesu FT-50/VX IR
SPM-603 for Motorola GP-300
SPM-604 for Uniden



NEW

ANTENNAS for Handhelds



- RD-8: VHF / UHF rubber duck. 6.5" tall. BNC connector.
RD-78: VHF / UHF extended rubber duck. 15" tall. BNC connector.
RD-9: VHF / UHF thin duck. 7" tall. BNC connector.
RD-9SMA: VHF / UHF thin duck. 7" tall. SMA connector.
RD-98: VHF / UHF extended thin duck. 17" tall. BNC connector.
RD-98SMA: VHF / UHF extended thin duck. 17" tall. SMA connector.
AL-800: Two-in-one telescoping VHF/UHF antenna. 7"-34" tall. BNC connector.

Meet the Kenwood Family

UBZ-LF14
FRS

TH-22AT
2 meters

TH-G71A
2 meters
& 440 MHz

Built-In TNC
APRS/GPS mapping
& messaging.
Advanced sky
command and
VC-H1 functions.

TH-D7A**
2 meters &
440 MHz w/TNC

TH-79AKSS
2 meters
& 440 MHz

KENWOOD
Pace-setting product
Send color images
on VHF/UHF or HF
SSB/FM.
(PC downloadable)

VC-H1
Visual
Communicator

** Pending F.C.C. Approval

TM-261A/461A
2 meters/440 MHz

TM-331A
220 MHz

TM-G707
2 meters & 440 MHz

TM-V7A
2 meters & 440 MHz

TM-541A
1200 MHz

TM-742AD/642AD
2 meters & 440 MHz/2 meters & 220 MHz

TS-50/60
HF All Mode/6 meter All Mode

TS-570B(G)
HF All Mode

TS-570S(G)
HF & 6 meter All Mode

TS-670S
HF All Mode

TS-950SDX
HF All Mode

FREE
Operating Manuals
via the FTP site*

KENWOOD
Amateur Radio Products Group

98ARD-1800-SCV

KENWOOD COMMUNICATIONS CORPORATION
AMATEUR RADIO PRODUCTS GROUP
P.O. Box 22745, 2201 E. Dominguez Street
Long Beach, California 90801-5745, U.S.A.
Customer Support/Brochures (310) 639-5300



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Kenwood News & Products
<http://www.kenwood.net>
Kenwood Bulletins
*<ftp://ftp.kenwood.net>

Explore the new opportunities of APRS™ with a handheld transceiver built for the future.



TH-D7A DATA COMMUNICATOR 144/440MHz FM Dual Bander

Meet Kenwood's new TH-D7A, an FM dual-band (144MHz/440MHz) handheld transceiver equipped with a TNC and all the features needed for easy amateur radio data communications — and especially APRS.

The TH-D7A offers exciting new adventures in Ham radio with a wide range of data communications options — including simple packet operation using the AX.25 protocol and the Automatic Packet/Position Reporting System (APRS), which is rapidly gaining popularity worldwide. You can also send and receive SSTV images using Kenwood's VC-H1.

APRS (Automatic Packet/Position Reporting System)

- ▶ **Position/directional data**
Hook up to an NMEA-0183 compatible GPS receiver and you can transmit your exact position for automatic calculation of distance, current speed and heading. Manual input of latitude/longitude is also permitted.
- ▶ **Versatile messaging**
Transmit your own alpha messages (up to 45 characters), bulletins, comments (up to 20 characters), and fixed messages (8 patterns).
- ▶ **Station List**
Store received APRS data in up to 40 memory channels
- ▶ **Grid square locator**
- ▶ **TX interval** (0.5/1/2/3/5/10/20/30 min.)
- ▶ **Packet path selection for Digipeat**
- ▶ **Weather station & PHG data reception**

Visual Communicator Control

- ▶ **Text superimpose function**
Add your call sign, RSV reports, comments, etc.
- ▶ **VC-H1 shutter**
Command a connected VC-H1 to initiate transmission
- ▶ **Fast FM**
Send an image in just 14 secs (approx).
- ▶ **SSTV transmission mode selection** (9 modes)



- ▶ **Dual receive for voice & image transmissions** (VHF only)

FEATURES

- Built-in 1200/9600bps TNC (1 packet, 1 frame, 256 bytes) compliant with AX.25 protocol
- Dual receive on same band (VHF only) for both voice and data (two frequencies simultaneously)
- Large (12 digits X 3 lines) dot-matrix LCD, multi-scroll key, menu mode & other user-friendly features
- 200 memory channels with 8-character memory name input
- 16 backlit keys
- Built-in CTCSS (38 EIA-standard subtone frequencies)
- 16-digit, 10-channel DTMF memory
- MIL-STD 810C/D/E water resistance
- High-gain dual band antenna
- High-speed (9600bps) PC-based packet communications for chat, BBS, etc.
- Kenwood Skycommand System (KSS) II for remote control of fixed HF transceiver—TS-570S/D(G) or TS-870S (requires optional PG-4R)
- Monitoring DX cluster, TM-742A/TM-V7A remote control (DTMF remote), etc.

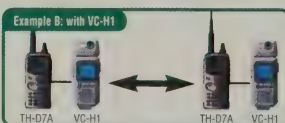


ISO 9001
JQA-1205

Communications Equipment Division
Kenwood Corporation
ISO9001 certification

NOTICE:

The TH-D7A has not been approved by the F.C.C. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the F.C.C. has been obtained. Pending approval in December, 1998.



KENWOOD
Amateur Radio Products Group
98ARD-1809-SCV

KENWOOD COMMUNICATIONS CORPORATION
AMATEUR RADIO PRODUCTS GROUP
P.O. Box 22745, 2201 E. Dominguez Street
Long Beach, California 90801-5745, U.S.A.
Customer Support/Brochures (310) 639-5300

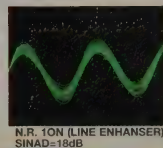
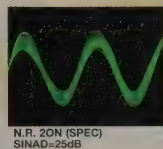
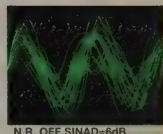
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Kenwood Bulletins
<ftp://ftp.kenwood.net>

A Breath of DSP Fresh Air

Kenwood was the first to offer DSP in the legendary TS-950SDX. Now you can enjoy the affordable benefits of Advanced Digital Signal Processing with the all new TS-570D/S(G)

Let the fresh air and sun shine in on your new HF experience.



Advanced Technology
Upgrade

TS-570D(G) HF TRANSCEIVER/TS-570S(G) HF + 6M TRANSCEIVER.

Kenwood has not been standing still since the introduction of the TS-570D/S HF Transceiver last year. Now you can command even more of Kenwood's advanced DSP technology with the G model.

The **DSP** filters and extracts signals with digital technology that is unmatched with standard analog circuits. It provides **CD-class transmit and receive audio quality** that can be shaped to your needs, and two powerful noise reduction systems: **Line Enhancer Method** for SSB/AM modes, and **Speech Processing by Auto Correlation (SPAC)** for CW mode. DSP also enables the **CW-Auto Tune** feature that automatically zero-beats CW signals.

The **Extensive Memory Functions** provide a bank of 100 memory positions split into 90 standard channels for general operation and 10 for programmable VFO, programmable scan and long-term memory. Memory contents can be scrolled, copied or locked out. In addition there are **5 quick memories** for storing frequencies and modes on the fly, perfect for the busy DX contest.

The powerful **Menu System** incorporates **46 menu features** and an **on-line guide** for instant reference. The **large amber backlit LCD display** provides 4 light levels for clear readability under any lighting conditions.

The TS-570D/S has no shortcomings in the construction and performance area. The **continuous-duty 100 watt transmitter** incorporates a large

heavy-duty heat sink with integrated cooling fan for non-stop operation even under extreme environmental conditions. The **wide-band receiver** is rock-stable from 500 kHz through 30 MHz with **dual pre-amps** and **dual bandpass filters** for exceptional selectivity and sensitivity.

With the features and performance of a high-end radio integrated into an affordable mobile-size package, the TS-570D/S is the perfect choice for the field or to build a full station around at home.

► **FREE** operating manual via FTP site

- ftp://ftp.kenwood.net
- Beat cancel
- 2 position antenna switch
- CW auto tune adjust (a world's first)
- Channel scan, program band scan, memory scan with channel lock-out and group channel scan, all with TO (time operated) or CO (carrier operated) resume modes
- Compact 10-5/8 inch by 3-3/4 inch front panel size for any travel or installation requirement
- Preset auto antenna tuner with 18 sub-bands
- Variable electronic keyer (0 and 100 wpm)
- Packet and FSK features
- RCP-2 software for PC-based display and memory configurations available via the Internet
- Full functionality on 6M (TS-570S) including DSP, 100 watts output and preset Auto Antenna Tuner
- QRP output adjustable from 5 to 100 watts

TS-570D/S (G) new features

- **TX sound quality monitor** with 9-step monitor volume for absolute control over voice quality
- **NR1 (SSB)** is operator controllable in 9-step increments, or automatically tracks input signal strength
- **New CW DSP Filters** (80 Hz, 150 Hz and 500 Hz) give you a total of 11 user-selectable filters
- **NR1 and NR2** settings can now re-configure automatically when changing mode groups (SSB/AM/FM to CW/FSK)
- **Manual weight feature** (with built-in electronic keyer) for adjusting the relative length of dots and dashes in 16 steps between 1:2.5 and 1:4.0
- **Equalize** receive signals, and use different settings for both TX and RX
- **"One-touch" DSP filter wide mode** allows 'resurfacing' to check the band conditions when operating in narrow mode
- **Dual selectable Beat Cancel (BC)** works against intermittent beat interference (except in CW mode)
- **CW auto tune** mode links only with the RIT frequency without changing the transmit frequency.

Advance Technology Upgrade is available in new production models and for pre-existing TS-570D/S; contact your dealer for details.



ISO 9001
JQA-1205

Communications Equipment Division
Kenwood Corporation
ISO9001 certification

INTERNET

Kenwood News & Products
http://www.kenwood.net

KENWOOD
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KENWOOD COMMUNICATIONS CORPORATION
AMATEUR RADIO PRODUCTS GROUP
P.O. Box 22745, 2201 E. Dominguez Street
Long Beach, California 90801-5745, U.S.A.
Customer Support/Brochures (310) 639-5300

SG-2020 COMPACT HF SSB/CW TRANSCEIVER

SGC 05-01
\$675⁹⁵

**The ultimate
"take-along"
Portable!**



Designed as a small, low power, low cost USB/LSB/CW HF companion for travel, where space is limited, or where only portable power is available.

Small, but fully microprocessor controlled and loaded with "Big Rig" features. Take it anywhere, use it anywhere – fixed, mobile, portable, aviation or boating. Operating from 12V DC, it has the lowest current consumption on the market, drawing typically 430mA in receive mode and less than 3 Amps at 20W CW output on transmit.

Transmit power is adjustable from 0 to 20W PEP output and covers 1.8 to 29.7 MHz (U.S. Ham Bands Only). An RF speech processor utilizing VOGAD baseband processing and RF clipping provides plenty of DX "talk-power".

The range of the General Coverage Receiver extends all the way from 400 kHz to 29.7 MHz for exciting worldwide reception of broadcast and shortwave stations. A back lit LCD display shows a 100Hz frequency resolution (10Hz overall resolution). There are 20 Simplex or Semi-Duplex memories to store your favorite operating frequencies.

Other functions and features include: SPLIT, RIT, XIT and tunable 100 to 2700Hz A.F. Bandpass. Also, a noise blanker, a fully adjustable (5 to 60 WPM) IAMBIC "B" mode keyer and convenient SWR metering and battery voltmeter. A dynamic hand microphone is included. The "smallest" portable rig, only 2.75" h x 5.9" w x 7" d, 4.4 lbs.

See Price List for selection of options and accessories for SGC Products

**HEAR
in the CLEAR
... add-on DSP**



SGC's PowerClear™ add-on DSP unit uses the power of advanced Digital Signal Processing to clear noisy, interference-plagued audio.

Mates with any HF SSB unit with a simple connection to the speaker output. Reduces noise and interference from virtually any audio source—HF, VHF/UHF transceivers, scanners, shortwave receivers, micro-wave, and telephone lines.

The PowerClear™ attacks noise and heterodynes with advanced DSP algorithms and lets you tailor bandpass response to your individual need—separate adjustments for low and high cutoff as well as audio bandpass shift.

It really cuts through noise with factory preset filters and with up to seven combinations of your choice. The bright red and green LEDs quickly show your selected filter adjustments. Only 3.65" high, takes up very little space on your operating desk.

SGC 70-07 \$359⁹⁵

Hear more with SGC's PowerClear!

SG-2000 HF SINGLE SIDEBAND GLOBAL RADIO TELEPHONE

FULL FREQUENCY COMMUNICATIONS FOR VOICE AND DATA

Make contact anywhere with the power-packed SG-2000 – a rugged HF transceiver with 1.8 to 30MHz coverage and 150W PEP output. Engineered for simple and efficient operation, the SG-2000 features an alarm generator, upper/lower sideband, true amplitude modulated (AM) receiver and channel scan as standard features.

Talk anywhere in the world on the HF Ham bands, receive and send time sensitive documents, decode UPI transmissions, get latest weather reports or listen to short-wave broadcasts from around the world. Great for marine – highly stable & rugged.

Exceptional features include 644 factory programmed ITU voice and data frequencies plus 100 field programmable channels. Scan all ITU channels and up to 100 memory channels in adjustable scan speeds and rates. An extra large liquid crystal, wide angle display with adjustable backlighting provides easy viewing day or night.

Optionally, the SG-2000 can be fully computer controlled by any standard RS-232 protocol connector to allow easy flow and management of data communications on RTTY, ARQ (SITOR), FEC, Packet and telegraphy modes. Fast RX/TX switching time ensures easy and secure data transmissions.

The compact front panel of the SG-2000 can also act as the remote head terminal, and up to 8 full function remote heads can be utilized. The remote heads can be mounted flush with the bulkhead so they do not intrude on people space and the high-impact, abrasion and water resistant housing will stand up well in the toughest environments. The optional universal 5-way head mount orients the control head in any direction, for easy operation.

The **PowerTalk™ SG-2000** version (below) has all of the features of the SG-2000 but incorporates **ADSP (Adaptive Signal Processing)** & **SNS (Spectral Noise Subtraction)** technology packed in a slim, state-of-the-art, control head to drastically reduces noise, providing unsurpassed signal quality.



SGC 04-01
\$1429⁹⁵

- Power Output: 150 watts PEP
- Transmitter frequency range: - 1.8 to 30 MHz
- Receiver frequency range: 500kHz to 30 MHz
- Modes: A3A, A3H, A3J and CW in LSB and USB, true AM in receive mode & data.
- Channels: 100 channels field programmable, 644 channels factory programmed ITU and data.
- Scan Channels: Up to 100 scan channels programmable in 10 groups
- Power Requirement: 13.6 VDC; 0.8A RX – 16A TX (voice)
- Size: 4 1/4" h x 10" w x 15" d • Weight: 12 lbs

See Price List for selection of options and accessories for SGC Products

PowerTalk™ Stunning HF-SSB Receive Clarity with SGC DSP



SGC 04-10
\$1679⁹⁵

With SGC's **PowerTalk™ SG-2000**, you'll intercept more weak HF signals, increase signal clarity and eliminate unwanted noise. You'll hear SSB signals clearer and easier than ever before. A true HF-SSB Power Tool!

PowerTalk™ combines the advanced receiver technology of SGC's exclusive **ADSP™**

(Automatic Digital Signal Processing) and **SNS™** (Signal Noise Subtraction). Fast audio and visual tuning – a DSP command center with a high performance spinner knob & bright LED indicators.

Includes all of the outstanding features of the SG-2000: 644 Ham and ITU discrete frequencies, programmable memory, large LCD display and 150 watts of power output.

DSP HF Modem with SmartEmail™



Link to the world! – transmit and receive e-mail via common mode carrier or receive weather bulletins/forecasts anywhere around the globe.

Requires an HF radio with SITOR compatibility, and a laptop computer running a general purpose communications program.

Designed for digital communications or as a free-standing general-purpose processor for embedded applications. Features open hardware/software architecture running DOS and Windows applications. Works with public domain protocols or develop your own custom modem sets for advanced protocol development.

Programmable, field upgradable, EZ to use graphical user interface **SGC 56-40 \$695⁹⁵**

SMARTUNERS

SG-230 Smartuner® 200W Microprocessor Controlled Antenna Coupler for HF-SSB, AM, CW & DATA



SGC 54-12
\$489⁹⁵

You can't buy a smarter tuner than this. An automatic antenna coupler so intelligent it precisely tunes any length antenna – 8 to 80 ft. in the HF band.

The Smartuner® automatically evaluates and switches 64 input and 32 output capacitance combinations, plus 256 inductance combinations in a "pi" network.

The amazing result is that it can automatically select from over a half-million different ways to ensure a perfect match for your transceiver.

And the most intelligent feature of all is that the Smartuner remembers the chosen frequency and tuning values in less than 10 ms, each time you transmit on that frequency.

1.8–30 MHZ RANGE • 3–200 WATTS INPUT
TUNES TO 80 FT. ANTENNAS (ALL TYPES) • MICROPROCESSOR CONTROLLED • 10MS TUNING TIME • NON-VOLATILE MEMORY • WATERPROOF • 2"d X 10"w X 12"d

SG-235 Smartuner® 500W Microprocessor Controlled HF Antenna Coupler



SGC 54-15
\$1169⁹⁵

SmartTuning – now you can achieve perfect coupling to your HF rig at the 500 watt power level.

Operates with any HF transceiver from 1.8 to 30 MHz range with 3 to 500 watts output power.

Automatically tunes any length antenna from just 23 ft. long without preliminary tuning or adjustments

The built-in microprocessor evaluates and switches 64 input and 32 output capacitance combinations plus 256 inductance combinations in a "pi" network (over a half-million possible combinations). The chosen frequency and tuning values are remembered allowing reselection of those values in less than 10 ms, each time you select that frequency. Flexibility is a key feature with its attractive options, including 24V DC.

• MICROPROCESSOR CONTROLLED • 1.8 TO 30 MHZ RANGE
• 3–500W INPUT • TUNES FROM 23 FT. ANTENNA AT FULL POWER • NON-VOLATILE MEMORY • 10-MS RETUNING TIME
• WATERPROOF • 16d" X 12"w X 3"h INCHES

See Price List for selection of options and accessories for SGC Products

SG-231 HF/VHF Smartuner® A smart, slim version of the intelligent Smartuner™ antenna coupler

- Complete frequency agility with no operator intervention
- Continuous coverage of 1 to 60 MHz at 100 watts with almost any antenna
- Compact design, fits the most restrictive installations
- Weatherproof case allows mounting at antenna feed point for highest efficiency

Uses a microprocessor controlled pi of L network to match virtually any load to your transceiver; with the SWR always 1:1.5 or better. Tuning solutions are stored in a non-volatile memory for fast (10ms) automatic recall! Operates with any HF or VHF transceiver, 3 to 100 watts, and requires only 12VDC and RF connections.



SGC 54-17
\$529⁹⁵



FOUR-WHEEL-DRIVE BASE STATION...

*... add a
QMS™ Antenna Tuner System
to your HF-SSB mobile*

For any HF-SSB rig from 1.8 to 30 MHz, up to 300W. Incorporates an SGC Smartuner® along with an efficient whip antenna and the QMS™ Quick Mounting System case which enables installation of the coupler and antenna on any small or large vehicle without drilling any holes.

Installation can be on the side or on the trunk, or roof – whatever location is convenient. It can be temporary or long-term and takes only 15 minutes. Supplied with straps, buckles & 4 suction cup feet to prevent damage to the vehicle surfaces. Strap hooks can be secured up to 5½ ft. apart.

The SG-303 antenna is a light-weight mobile antenna for operation from 1.8–30MHz, providing wide a frequency range and ease of tuning with the Smartuner®. Total length is 9 ft. in two sections with no traps to degrade performance. The inner core is a large gauge stainless steel rod with a layer of fiber composite helically wrapped with 3mm copper strap which is equal to #4 wire.

The antenna installs on a sturdy weatherproof rubber encapsulated spring mount. The adjustable base and ratchet mechanism allows for easy orientation.

*The QMS™ Quick Mount System comes in
5 different packages, as follows:*

QMS The basic Quick Universal Mount System case. Includes strapping elements and 4 suction cups to mount the SGC coupler and antenna on any vehicle. Antenna & Coupler are not supplied.

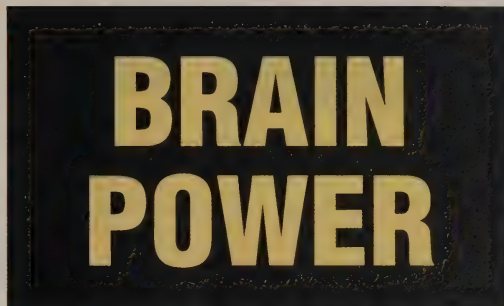
QMS-1 – The QMS (above) *plus* the SG-230 Automatic Coupler.

QMS-2 – The QMS *plus* the SG-230 Automatic Coupler & SG-303 9 ft. whip with mounting hardware.

QMS-3 – **500W SYSTEM** The QMS™ *plus* the SG-235 Automatic Coupler and SG-303 1.8– 30 MHz HF antenna System with mounting hardware.

QMS-7 – The QMS *plus* the SG-231 Automatic Coupler and the SG-303 7 ft. dual resonant whip antenna with mounting hardware. Provides continuous 1–60 MHz operation.

See Price List for selection of options and accessories for SGC Products

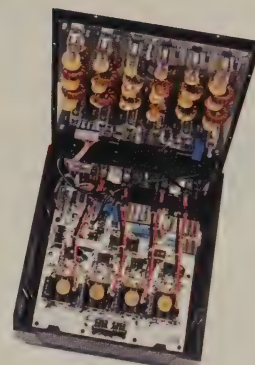


SG-500



**Smart
PowerCube**

**SGC 52-96
\$999⁹⁵**



Microprocessor Controlled Linear Amplifier for 1.8 to 24 MHz

The SG-500 SmartPowerCube produces tremendous power—nearly as much as a 1000W amplifier, but it requires less than one cubic foot of space.

Electronic brain power makes this possible. The SG-500 is an intelligent—microprocessor-controlled high power linear amplifier, designed with high efficiency transistors. Its electronic brain constantly monitors your HF-SSB's activities, power needs, and antenna condition, and automatically—in less than 15 milliseconds—selects the right broadband filter.

Designed to perform reliably and essentially unattended, in the most demanding conditions. For maximum power – intelligent power – at low cost, the Smart Power Cube is just the amplifier for you.

- Covers: 1.8 to 24 MHz • Power Output: SSB: 500W PEP; CW: 500W for 10minutes, no fan; 500W unlimited with fan; AM: 250W carrier maximum • Automatic bandswitching
- Protection: Input overdrive, over current, over temperature
- Size: 6" x 12¼" d x 11¼" w

SGC Inc., SGC Building, 13737 S.E. 26th St. Bellevue, WA. 98005
P.O. Box 3526, 98009 Fax: 425-746-6384 or 746-7173
Tel: 425-746-6310 or 1-800-259-7331
World Wide Web/E-mail: sgeworld.com



No Compromise Communications

KEYERS

Professional Classroom Tutor

MFJ-414 Features include LCD read-out, printer port & audio tape recording output.

Build & save 3 custom sets (16 characters ea.) for extra practice. Or combine these to give you 48 characters for using the KOCH method. Customize random words for practice, too.

Use with 144/440MHz FM HT or HF transceiver for on-air code practice. VECs can give up to 16 exams. Full-featured memory keyer - has 1000 character memory, semi/auto modes, iambic A/B, reverse paddle, change speed & tone on-the-fly. Practice sending into the MFJ-414 w/iambic paddle or straight key. Use built-in or external speaker or headphones. Includes serial port cable and open-end patch cable. 12 VDC or 110 VAC. 8 1/2" w x 2 1/2" h x 6" d. **\$189⁹⁵**

MFJ-281 External ClearTone™ Speaker. Use with above for loud volume. **\$9⁹⁵**

MFJ-1315 AC Adapter **\$14⁹⁵**



MFJ

MFJ ENTERPRISES, INC.

422D Keyer-Paddle Combo

Keyer unit installs on top of a Benchner Iambic Paddle. If you already have the paddle, buy just the keyer unit. Uses Curtis™ keyer chip. Speed is 9-50 wpm. Adjustable weight & tone, dot-dash memories & sidetone. Semi-automatic & tune or automatic modes. Keys grid block, cathode or solid state. Uses 9V battery or AC adapter. 4 1/2" x 2 1/2" x 5 1/2" d. **\$134⁹⁵**

422DX Keyer only **\$79⁹⁵**

407D Deluxe

Electronic Keyer

Features dot-dash memories, self completing dots and dashes; jam-proof spacing. RF proof, instant start. Single squeeze, or straight key. Front panel controls: speed, weight, tone and volume, ON/OFF, tune, auto/semi-automatic. Selectable A or B-type iambic keying. Built-in speaker, uses 9V battery, or MFJ-1312B AC adapter. 7" x 2" x 6" d. **\$69⁹⁵**



401D Econo Electronic Keyer II Similar to MFJ-407C but with external speed and volume controls, internal weight and tune controls. Uses 9V battery or MFJ 1312 AC adapter **\$49⁹⁵**

492

Menu Driven

Memory Keyer

No keypad or complex sequences to remember. Save and play your messages; decrement serial #s; set speed, weight, sidetone; enter iambic, semi-auto, handkey, message queue, paddle command modes; turn on/off sidetone; transmitter tune; keying output on/off; select iambic A or B; reverse paddle; Morse trainer; store starting serial number. Holds 192 characters in 4 soft-sectored message memories, expandable to over 8K characters in 8 memories. Lithium battery back-up. Front panel controls for speed (5-100 WPM) and volume, built-in sidetone speaker. Direct or grid block keying output. Uses 9V battery or 110V AC adapter. 6 1/2" x 2 1/2" x 6 1/2" **\$89⁹⁵**



493 All features of the MFJ-492, but with 32K memory. IBM keyboard input, serial port for computer interface and QSO simulator **\$129⁹⁵**

451 Morse Keyboard A stand-alone CW keyboard with 200 character type-ahead buffer, and two 100 character memories. Requires 12VDC or MEJ-1312B 110VAC adapter **\$89⁹⁵**

452 Morse Keyboard with 16 character LCD display. Comes with keyboard **\$119⁹⁵**

MFJ on the Web: www.mfjenterprises.com



VIBROPLEX®

The Original "Bug" - first patented in 1904, the Original is still manufactured today using tools and dies similar to those used by its inventor, Horace G. Martin. Designed for code speeds of 20 wpm on low side to 50+ wpm on high side. Standard model has painted base and chrome top parts. Deluxe model has polished chrome base and top parts with fine jewel movements for smooth operation. Presentation model has polished chrome base with 24K gold-plated base plate and chrome top parts. Gold model has gold-plated base with chrome top parts.

Standard (#110) \$159⁹⁵ • Deluxe (#105) \$199⁹⁵ • Presentation (#100) \$269⁹⁵ • Gold (#090) \$299⁹⁵

Vibrokeyers Single lever paddle (top) initiates the automatic dots and dashes of an electronic keyer. Iambic paddle allows automatic dot & dash insertion. **Standard:** black base, chrome parts; **Deluxe:** chrome base and top parts with jeweled movements; **Presentation:** (iambic only) 24K gold-plated base and top parts with jeweled movements; **Gold:** 24K gold-plated base and top parts with jeweled movements.

Vibrokeyer: Standard (#120) \$139⁹⁵

Deluxe (#115) \$179⁹⁵ • Gold (#113) \$269⁹⁵

Iambic: Standard (#135) \$139⁹⁵

Deluxe (#130) \$179⁹⁵ • Presentation (#125) \$239⁹⁵ • Gold (#123) \$269⁹⁵

Brass Racer Iambic Solid brass iambic paddle mounted on a polished hardwood base **\$99⁹⁵**

Square Brass Racer Solid lacquered brass iambic paddle on a polished hardwood base. Magnetic action, no springs **\$139⁹⁵**



Straight Keys: Unique mechanical action, unlike any straight key ever manufactured.

Standard (#155) \$139⁹⁵ • Deluxe (#160) \$179⁹⁵

Gold (#153) \$269⁹⁵

Double Keys: Choice of Iambic & Straight Key or Vibrokeyer & Straight Key. Double keys allow you to instantly switch from using an electronic keyer to the personal touch of a Straight Key.

Straight key/Iambic (#165) \$319⁹⁵

Straight key/Vibrokeyer (#170) \$319⁹⁵

AMECO



OCM-2

Combination

Code Practice Oscillator

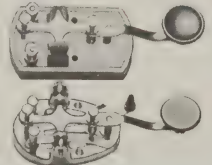
& CW Monitor

Volume control, 3" speaker, and headphone terminals. Requires a code key and a 9V battery.

Kit \$19⁹⁵ • Wired \$24⁹⁵

K-1 Low-cost general purpose key with phenolic base, adjustable tension and contact spacing. **\$10⁹⁵**

K-4 Deluxe high quality key. Polished brass base, shorting bar **\$16⁹⁵**



More AMECO Products - See Price List & Index

LOGIKEY

Full featured version of the famous Super CMOS III keyer design! This new super friendly Fully Iambic Keyer offers:

- Non-volatile mem. • 6 editable messages, 1,530 characters • Messages can include powerful programmed func., eg, automatic contest numbers, speed changes, pauses • Message can allow paddle inserted text & can loop for continuous replay • Linear speed control, available range: 5-60 WPM • Adjustable weighting and monitor tone • Tune function for transmitter adjustment • Auto character spacing if desired • Can emulate other keyers, including Curtis "A" timing • Ultra Speed Mode for messages up to 990 WPM! • Contest serial number 001-9999, with push button decrement • Full beacon capability • Full compensation for QSK rig timing • Keys solid-state or grid-blocked tube rigs. • 12V DC, < 0.1 amp • 4 1/2" w x 2 1/2" h x 4 3/4" d. **K-3 \$119⁹⁵**

IDIOM Press

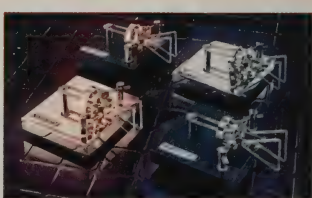


BENCHER, INC.



"RJ" HAND MORSE KEYS • A superb and responsive instrument which will bring new pleasure to traditional Morse keying. Features include oil impregnated sintered bearings at pivot points to impart friction-free pivoting and wobble-free vertical tracking. Stainless steel locking screw allows individual adjustment for arm height, tension and contact spacing. Black "Navy" style knob with removable skirt gives a solid feel with outstanding tactile feedback. Heavy metal base available in black texture or chrome finish with anti-skid rubber feet.

RJ-1 Black base **\$89⁹⁵ • RJ-2** Chrome base **\$99⁹⁵**



IAMBIIC & SINGLE LEVEL PADDLES • The highest quality, offering precise control, reliability and years of trouble-free operations. Wide-range adjustment of tension and contact point spacing. Self adjusting needle bearings, gold-plated solid silver contact points, and polished acrylic plastic paddles. The Main frame, contact post, spring posts and bearing ring are all precision machined from solid brass, then chrome or gold plated for durability and rich appearance. Heavy steel base with non-skid feet.

BY-1 Black base **\$87⁹⁵ • BY-2** Chrome **\$104⁹⁵**

BY-3 Gold **\$249⁹⁵ • BY-4** Black, Gold comp. **\$149⁹⁵**

HF+VHF/UHF Transceivers

FT-847 / FT-100 / ATAS-100

EARTH STATION

YAESU
...leading the way.SM

HF+VU FT-847 Multi-Mode HF/VHF/UHF Satellite Transceiver

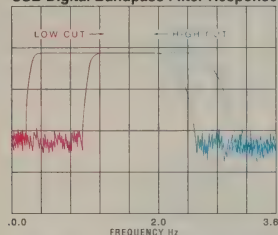
Utilizing the latest computer-aided design techniques, Yaesu's engineers have achieved an engineering breakthrough in the FT-847 Earth Station: a full-power transceiver covering the HF, 50 MHz, 144 MHz, and 430 MHz bands in a package about 2/3 the size of a briefcase! The FT-847 includes Full Duplex satellite operation, DSP receiver filters, and exceptional receiver performance for today's crowded bands.

Features

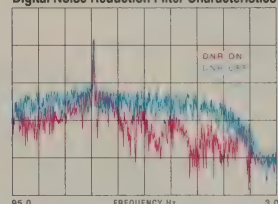
- Frequency coverage:
 - RX : 10 kHz-37 MHz, 37-76 MHz, 108-174 MHz, 420-512 MHz
 - TX : 160-6 meters/2 meters/70 centimeters 4 meters (UK version) 5.1675 MHz (Alaska Emergency Channel, USA version)
- Power Output: 100W (160-6m), 50W (144/430 MHz), 10W (4m)
- Full Cross-band Duplex Satellite with Normal/Inverted Tracking
- DSP Bandpass, Notch, and Noise Reduction Filters
- Four antenna jacks (HF/50/144/430) for easy interconnections
- Low-noise preamplifiers (HEMT on 430 MHz) and wide dynamic range
- Bright LCD with dual frequency display
- Main and Sub VFO Tuning Dials for Satellite Doppler Correction
- Built-in CW Electronic Keyer
- Shuttle-Jog™ Tuning Dial
- IF Shift
- Rear panel AFSK connections for 300/1200/9600 bps packet, RTTY, etc.
- Optional Collins® Mechanical Filters in 2.5 kHz or 500 Hz bandwidths
- Keyboard frequency entry
- Automatic Repeater Shift, Cross-band Repeat, and FM Wide/Narrow features
- Built-in CTCSS and DCS for FM operation
- Discriminator Center Meter
- High-speed (57K6 bps) RS-232C port for external control
- Optional FC-20 External Antenna Tuner
- Compatible with ATAS-100 Active-Tuning Antenna System
- Optional FVS-1A Voice Frequency Announcement module



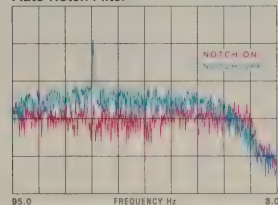
SSB Digital Bandpass Filter Response



Digital Noise Reduction Filter Characteristics



Auto-Notch Filter



FIELD COMMANDER

HF+V/U FT-100 Ultra-Compact HF/VHF/UHF Transceiver

Breaking new ground in the field of micro-miniature transceiver design, the FT-100 is the only miniature mobile transceiver providing coverage of the 160-6 meter bands plus the 144 MHz and 430 MHz bands. Combining a unique, user-friendly front panel with high-tech features like Digital Signal Processing, the FT-100 provides performance capability well above that of many base station transceivers. Ideal as a compact mobile, vacation, or expedition transceiver, the FT-100 provides wide frequency coverage and operating versatility for every operator's requirements.

Features

- Frequency coverage:
RX : 100 kHz-30 MHz, 30-970 MHz
(Cellular/digital telephone frequencies are blocked)
TX : 160-6 m/144-148 MHz/430-450 MHz
- Power output: 100W (160-6 m), 50W (144 MHz), 20W (430 MHz)
- DSP Bandpass Filter, Notch Filter, Noise Reduction, and Equalizer
- IF Noise Blanker
- IF Shift
- SSB, CW, AM, FM, AFSK, Packet (1200/9600 bps) operation
- Two Antenna Jacks (HF/50 and 144/430)
- VOX
- Dual VFOs
- Available IF bandwidths of 6 kHz, 2.4 kHz, 500 Hz, and 300 Hz (6 kHz, 500 Hz, 300 Hz filters optional)
- Built-in Electronic Memory Keyer
- Speech Processor
- Built-in CTCSS and DCS for FM operation
- Automatic Repeater Shift and Auto-Range Transponder System
- Smart Search™ Automatic Memory Channel Loading System
- 300 memory Channels
- Quick Memory Bank (QMB)
- Bright LCD with multi-function display
- Optional FC-20 External Antenna Tuner
- Compatible with ATAS-100 Active-Tuning Antenna System



PowerGain

HF+V/U ATAS-100 Active Tuning Antenna System

Yaesu's patented ATAS-100 (Active-Tuning Antenna System) provides HF/VHF/UHF coverage with automatic motorized tuning. Utilizing control signals from the transceiver's microprocessor received via the coaxial cable, the ATAS-100's internal motor adjusts the radiator length for best SWR. The ATAS-100 covers the 7/14/21/28/50/144/430 MHz bands, and is compatible with the FT-100 and FT-847.



VHF+UHF Mobile Transceivers

FT-8500 / FT-8100R

Mobile **FT-8500** 50W Dual Band Mobile

The top-of-the-line FT-8500 includes extraordinary new features, such as the Spectra-Analyzer™, which allows you to view channel activity above and below your current frequency (or within a memory bank). Choose either the unique FS-10 Smart Controller™ Microphone or the compact MH-39 DTMF Microphone to command your FT-8500 into VHF and UHF excitement!

Features

- Frequency coverage:
2m : RX : 110-174 MHz TX: 144-148 MHz
70cm : RX : 410-500 MHz TX: 430-450 MHz
- Built-in Spectra-Analyzer™
- 6-Character Alpha-Numeric display
- 110 Memories (in 5 memory banks)
- Omni-Glow™ Display
- Digital Battery Voltage Display
- Dedicated Packet I/O Jack (1200/9600 baud)
- 3-Level Auto-Mute with Mute Timer
- AM Aircraft Receive (110-137 MHz)
- V+V, U+U, V+U Dual Receive
- 3 Selectable Power Output Levels
2m: 50/10/5W 70cm: 35/10/5W
- Auto Power Off (APO) and Time-Out Timer (TOT)
- 10-Memory DTMF Autodialer
- Cloning Feature
- 5 Scanning Modes including new Clear Scan
- Selectable Scanning Speed
- Cross-band and One-way Repeat
- Dual Speaker Jacks
- Easy-to Understand Feature Menu



FS-10 Smart Controller™ Microphone

Use the Joystick-type lever, or a variety of buttons and keys placed on each side of the microphone to access functions and features.

ADMS-2 Windows™ Programming Software for FT-8500, FT-8100R, and FT-3000M.

Easy to install software permits assignment of frequencies, repeaters, and Alpha-Numeric labels from your computer. Simple to use "how to" instructions are included.



Mobile **FT-8100R** 50W Dual Band Mobile

Yaesu's leading-edge engineering philosophy brings you the FT-8100R Compact Dual Band FM Mobile Transceiver, a unique blend of rugged RF design combined with the no-nonsense ergonomics which are so important in mobile operation. The intuitive front panel layout makes frequency navigation simple and efficient, while the strong receiver front end provides outstanding protection from intermodulation in urban areas. Wide receiver frequency coverage, coupled with a clean, reliable transmitter, make the FT-8100 the logical choice in Dual Band Mobile Transceivers.

Features

- Frequency Coverage
RX : 110-550 MHz/750-1300 MHz*
TX : 144-148 MHz/430-450 MHz
- 3 Power Output Levels
2m 50/20/5 Watts 70cm 35/20/5 Watts
- 310 Memory Channels (155 per band, including "Home" and Smart Search™ channels)
- Enhanced Smart Search™
- CTCSS Encode
- Time-Out Timer (TOT)
- S-Meter Squelch
- Dual Receive (V+V, U+U, V+U)
- Crossband Repeat
- Intelligent Band Display (IBD)
- Receiver Muting
- Auto Power Off (APO)
- MIL-STD 810 Rating
- Omni-Glow™ Display
- 1200/9600 bps Packet Compatible
- Automatic Repeater Shift (ARS)

*Cellular blocked.



Mobile/ Multi-Purpose Mobile Transceivers

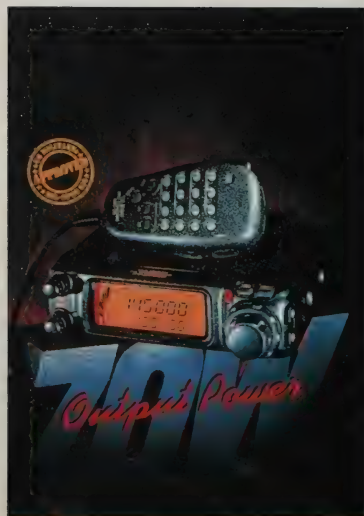
FT-3000M/FT-2500M/FT-290R

Mobile FT-3000M 70W High Powered 2-m FM Mobile

The FT-3000M is the only amateur 2-meter FM mobile transceiver with 70 watts of output power. Built to rugged MIL-STD specifications, the FT-3000M's receiver is also a tough competitor in today's difficult RF environment. Innovative features and superb human engineering make the FT-3000M an industry leader in performance and operating ease.

Features

- Frequency Coverage
 - RX : 110-180 MHz
 - 300-520 MHz
 - 800-999 MHz*
- TX : 144-148 MHz
- AM Aircraft Receive
- MIL-STD 810 Rating
- Interactive Programming Menu
- High Power Output:
 - 70/50/25/10 Watts
- Quick-Touch™ Dual Concentric Control Knob
- Twin Cooling Fans
- ADMS-2 Windows™ Programmable
- Digital Coded Squelch (DCS)
- 81 Memory Channels
- Auto Range Transpond System™ (ARTS™)
- 1200/9600 Baud Packet Compatible
- Smart-Search™
- Alpha-Numeric Display
- Dual Watch
- Cellular blocked



Backlit DTMF Microphone

Yaesu's industry-first backlit microphones help to ensure safe autopatch operation in dim light, or during nighttime use. Designed for ease of operation, these mics provide 16 keys, including the "4th row" often used for repeater control purposes. See the Yaesu Amateur Products Accessories and Options brochure for the exact model number fitting your mobile transceiver.

See the "Accessories & Options" pages for the exact model number fitting your mobile transceiver.

Mobile FT-2500M 50W 2-m Mobile

The FT-2500M provides the most intermod-resistant receiver section in the amateur radio industry, coupled with a rugged mechanical design which was awarded MIL-STD 810 certification for shock and vibration. The easy-to-read LCD display and outstanding ergonomics have made the FT-2500M a "best seller" in the marketplace.

Features

- Frequency coverage:
RX : 140-174 MHz
TX : 144-148 MHz
- 31 Memory Channels, Odd Splits On Any Memory
- Alpha-Numeric Display
- Advanced Track Tuning (ATT)
- Automatic Display Dimmer
- True FM Modulation
- Backlit DTMF Mic
- CTCSS Encode Built-in (Decode Optional)
- Five Scanning Functions
- 3 Selectable Output Power Levels: 50/20/5 Watts



Mobile +Multi FT-290R II VHF Multi-Purpose Mobile

Ideal for base, mobile, vacation, or expedition use, these monoband multi-mode transceivers are outstanding for emergency, travel, weak-signal DX, and/or satellite operating applications. Optional battery packs allow over-the-shoulder portable use for search-and-rescue operations!

Features

- Frequency coverage:
TX/RX: 144-148 MHz
- RF Output Power:
25 Watts
(2 Watts Portable)
- All Mode Operation
USB, LSB, CW, FM



Handheld Transceivers

FT-51R/FT-50RD/FT-11R/FT-41R

Handheld **FT-51R** 5W Full Featured Dual Band Handheld

The first dual band HT with scrolling instruction menu "windows!" Spectrascope™ too, for continuous real time activity scanning in VFO or 8 user-choice menus.

Features

- Frequency coverage:
2m RX: 110-180 MHz TX: 144-148 MHz
70cm RX: 420-470 MHz TX: 430-450 MHz
- 120 Memory Channels (80 w/Alpha-Numeric)
- Spectrascope™ LCD Display
- Scrolling User Help Menu
- 8 Character Alpha-Numeric Display
- Up/Down Volume/Squelch Controls & Display
- Selectable Sub-Band TX Mute
- Automatic Tone Search (ATS)
- Digital Battery Voltage Display
- AM Aircraft Receive
- Scanning Light System (SLS)
- Large Backlit Keypad & Display
- Automatic Repeater Shift (ARS)
- Multiple Scanning Modes
 - 3 Selectable Scan Stop Modes with Scan Skip
 - User Selectable Lock Function w/15 Combinations
 - Automatic Power Off (APO)
 - TX/RX Battery Savers Built-in
 - Handy Cloning Feature
 - 5 Selectable Power Output Levels
 - Message System with CW ID
 - Selectable RX Smart Mute™
 - Cross-Band & One-Way Repeat Functions
 - DTMF Paging/Coded Squelch Built-in
 - 3 Dual Receive Configurations - VHF/VHF, UHF/UHF, & VHF/UHF
- MH-29A28**
LCD Speaker Microphone
LCD Display microphone with remote functions for easy operation. Use with FT-51R.

Handheld **FT-50RD** 5W Heavy Duty Dual Band Handheld

For the foremost in top-performing, durable, dual band handhelds there is one choice. The FT-50R. Manufactured to rigid commercial grade standards, the FT-50R was the first amateur dual band HT to achieve a MIL-STD 810 rating. Water-resistant construction uses weather-proof gaskets to seal major internal components against the corrosive action of dust and moisture. And, the rugged FT-50R withstands shock and vibration, so throw it in with your gear!

Features

- Frequency coverage
RX: 76-200 MHz, 300-540 MHz.
590-999 MHz (cellular blocked)
TX: 144-148 MHz, 430-450 MHz
- AM Aircraft Receive
- MIL-STD 810 Rating
- Digital Coded Squelch (DCS)
- 112 Memory Channels
- 12V DC Direct Input
- High Speed Scanning
- Alpha-Numeric Display
- CTCSS Encode (Decode w/FTT-12)
- Auto Range Transpond System™ (ARTS™)
- Dual Watch
- Direct FM
- High Audio Output
- ADMS-1 Windows™ Programmable
- Four Battery Savers: Automatic Power-Off (APO)
- Receive Battery Saver (RBS)
- Selectable Power Output (SPO)
- Transmit Battery Saver (TBS)
- Time Out Timer (TOT)
- 2.5 and 5 Watt Versions Available
- Optional Digital Voice Recording System (DVRs)

Handheld **FT-11R** **FT-41R** 5W Handheld

Amazingly compact with a full sized keypad. You'll wonder how we did it, till you remember Yaesu pioneered 2-way radio micro technology. It's full-featured and pencil thin with a 4.8 V battery for 1.5 watts on TX. Just punch up the exclusive backlit DTMF keypad and Volume/Squelch control, set the alphanumeric display and start talking!

Features

- Frequency coverage:
FT-11R 2m RX: 110-180 MHz TX: 144-148 MHz
FT-41R 70cm RX: 430-450 MHz TX: 430-450 MHz
- Selectable Alpha-Numeric Display
- Compact Battery Design
4.8 V produces 1.5 Watts
9.6 V produces full 5 Watts
- 150 Memory Channels (75 when Alpha Numeric)
- AM "Aircraft" Receive (110-136)
- Automatic Battery Saver (ABS)
- MOS FET Power Module
- Backlit DTMF Keypad and Display
- Backlit Up/Down Volume and Squelch Controls
- DTMF Paging/Coded Squelch
- Automatic Power Off (APO)



FT-10R/FT-40R/FT-411E/FT-23R/FT-33R

Handheld

FT-10R
FT-40R

5W Heavy Duty Handheld

Built to mil-spec commercial radio standards inside and out, these HTs are feature-packed, and available in either 2.5 Watt or 5 Watt versions, with any of four keypad options. When the going gets tough, the tough use Yaesu!

Features

Frequency coverage:

FT-10R 2m: RX: 140-174 MHz

TX: 144-148 MHz

FT-40R 70cm: RX: 420-470 MHz

TX: 430-450 MHz

Choice of 4 keypads

FTT-10/A16S

FTT-10/A16D

FTT-10/A16

FTT-10/A06

Auto Range Transpond

System™ (ARTS™)

MIL-STD 810

High Audio Output

2 V DC Direct Input

Alpha-Numeric Display

RX/TX Battery Savers

Digital Coded Squelch (DCS)

Digital Voice Recording System

(DVRS) w/FTT-10/A16S

True FM for better voice clarity

High Speed Scanning System

2.5 and 5W available

Full line of accessories

Handheld

FT-411E
5W VHF FM Handheld

For outstanding HT performance and ease of operation, the FT-411E is without peer in its price class. Programming ease and durability make this HT the choice of amateurs worldwide.

Features

• Frequency coverage:

FT-411E 2m: RX: 140-174 MHz

TX: 144-148 MHz

• 49 memory Channels

CTCSS Encode/Decode built-in

• Built-in VOX

• Backlit Keypad and Display

• Automatic Power Off (APO)

• Programmable Battery Saver

• Multiple Scan Modes

Handheld

FT-23/33R
5W VHF FM Handheld

Ultra-compact and microprocessor-controlled, these HTs offer the convenience of small size yet simple operation. Designed for years of active use, the housing is designed to withstand a standard EIA 1-meter drop test without damage.

Features

• Frequency coverage:

FT-23R 2 m: RX/TX: 144-148 MHz

FT-33R: 1.25m:

RX/TX: 222-225 MHz

• 10 Memory

Channels

• Simple Operation

• Multiple Scan

Modes

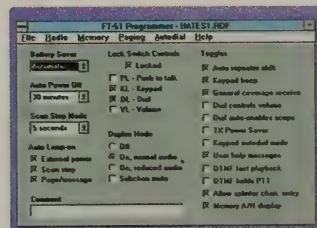
• Rugged Die-cast

Frame

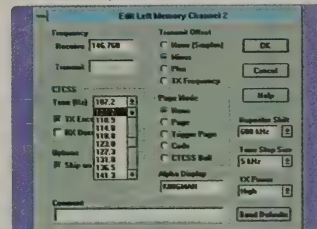
ADMS-1

Windows™ Programming
Software Kit

Program all the features for the FT-51R, FT-50R, FT-11R/41R, FT-10R/40R, and the VX-1R with ADMS-1 Windows™ Programming Software. Just "point and click," and easy programming of these HTs is yours. Use ADMS-1 to download frequency data from HT to computer, then clone the information to another FT-51R, FT-50R, FT-11R/41R, FT-10R/40R or VX-1R instantly! Create memory files for cities you visit, then load and go! Affordable for everyone, ADMS-1 Windows™ Programming Software is a useful package which will simplify HT programming.

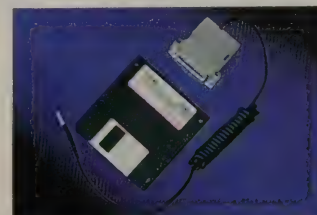


Main Window -Use the Main Window to customize your handheld the way you like it. For example, the Auto Repeater Shift and Keypad Beep tone can be selected "on" or "off." When you are scanning, the display lamp can be programmed to light up when a Busy Channel is found.



Memory Channel Edit Window

-Each Memory Channel has a detailed window. With a simple click of the mouse, you can program the following for each memory: Frequency, Alpha Name, Repeater Offset, CTCSS, Power Level, Channel Step Size. And more!



ADMS-1 Windows™
Programming Software



Handheld Transceivers

VX-1R / VXF-10 / VXF-1

Handheld

Handheld VX-1R

500mW/1W* Ultra Compact Dual Band Handheld

The world has never seen a dual-band amateur hand-held transceiver with such small size combined with ultra-wide frequency coverage. Until now. Sporting dimensions of 81 x 47 x 25 mm WHD (3.2" x 1.9" x 1"), the VX-1R provides superb local communications at a power level of 500 mW to 1 Watt, while including impressive memory and scanning capabilities. The wideband receiver coverage includes VHF and UHF TV audio, AM broadcast, FM broadcast, AM aircraft band, and public safety channels. The wide world of Dual Band performance has just gotten smaller. . .much smaller!

*External Power Supply

Features

- Frequency coverage
RX: 76-999 MHz**
TX: 144-148, 430-450 MHz
- AM/FM/TV Broadcast Receive
- AM Aircraft/Public Safety Receive
 - CTCSS Encode/Decode
 - DCS Encode/Decode
 - CTCSS/DCS Tone Search
 - Dual Watch
 - Smart Search™
 - Auto Range Transpond System™ (ARTS™)
 - Priority Channel Alarm
 - ADMS-1D Windows™ Programmable
 - 1 Watt Output (External Power Supply)
 - Lithium Ion Battery included
 - 80-Minute Rapid Charger included
 - Internal Speaker included
 - Flexible Antenna, Belt Clip, Hand Strap

**Cellular Excluded



Handheld VXF-10

FRS(Family Radio Service) With U.S. Weather Channels

The VXF-10 Adventurer™ portable radio operates in the Family Radio Service, where no license is required! Providing 500 mW of quiet, reliable two-way communications within a (typical) two-mile range (3.2 km), the VXF-10 also includes a one-touch Weather Channel key, Call Alert, and Emergency Calling feature. And no monthly charges, as on cellular telephones!

Features

- 14 Channels with Clear Audio Quality
- Digital Coded Squelch, for reduced interference
- Call Alert selectively will ring your radio
- Automatic scanning of the 10 U.S. Weather Channels
- Extended battery life, using 3 AA batteries (not included) for over 30 hours of typical operating time
- Group calling allows you to call other members of your family or group simultaneously
- Auto-Range Transpond System alerts you when a similarly-programmed VXF-10 is out of range
- Rugged outdoor design resists moisture and dust contamination
- Emergency feature emits a "beep" every few seconds to alert others on your channel that you may need help
- No license required for operation in Family Radio Service



Handheld VXF-1

FRS(Family Radio Service)

The VXF-1 is a low-cost way to keep in touch with family and friends in the new Family Radio Service, where no license is required!

Features

- 14 Channels with Clear Audio Quality
- Digital Coded Squelch, for reduced interference
- Extended battery life, using 3 AA batteries (not included) for over 30 hours of typical operating time
- Group calling allows you to call other members of your family or group simultaneously
- Auto-Range Transpond System alerts you when a similarly programmed VXF-1 is out of range
- Rugged outdoor design resists moisture and dust contamination
- No license required for operation in Family Radio Service



MFJ Switching Power Supplies

Power your HF transceiver, 2 Meter/440 MHz mobile/base and accessories with these new 25 or 45 Amp MFJ MightyLite™ Switching Power Supplies! **No RF hash . . . Super lightweight . . . Super small . . . Volt/Amp Meters . . .**



MFJ-4225MV
25 Amp **\$139⁹⁵** AES PRICE

NEW!



MFJ-4245MV
45 Amp **\$189⁹⁵** AES PRICE

MFJ's new adjustable voltage switching power supplies do it all! You can power your HF transceiver or 2-Meter/440 MHz mobile or base and accessories.

MFJ's *MightyLites*™ are so lightweight and small you can carry them in the palm of your hand! Take them with you anywhere.

No more picking up and hauling around heavy, bulky power supplies that can give you a painful backache, pulled muscle or hernia.

MFJ's 25 Amp *MightyLite*™ weighs just 3.7 lbs. -- that's 5 times lighter than an equivalent conventional power supply. MFJ's 45 Amp version is even more dramatic -- 8 times lighter and weighs just 5.5 pounds!

No RF hash!

These babies are clean . . .

Your buddies won't hear any RF hash on

your signal! You won't hear any in your receiver either!

Some competing switching power supplies generate objectionable RF hash in your transmitted and received signal.

These super clean MFJ *MightyLites*™ meet all FCC Class B regulations.

Low ripple . . . Highly Regulated

Less than 35 mV peak-to-peak ripple under 25 or 45 amp full load. Load regulation is better than 1.5% under full load.

Fully Protected

You won't burn up these power supplies! They are fully protected with Over Voltage and Over Current protection circuits.

Worldwide Versatility

MFJ *MightyLites*™ can be used anywhere in the world! They have switchable AC input

voltage and work from 85 to 135 VAC or 170 to 260 VAC. Easily replaceable fuse.

MightyLites™ . . . Mighty Features

MFJ *MightyLites*™ feature a front-panel voltage control. It lets you vary the output voltage from 9 to 15 Volts DC and gives you a highly regulated voltage output.

You get an easy access front-panel with five-way binding posts for heavy duty use and a cigarette lighter socket for mobile accessories. The MFJ-4245MV has two sets of quick-connects on the rear for accessories.

Large 3 inch dual meters are brightly illuminated to make it easy to monitor load voltage and current.

A whisper quiet internal fan efficiently cools your power supply for long life.

Two models to choose from . . .

MFJ-4225MV, \$139.95. 25 Amps maximum or 22 Amps continuous. Weighs 3.7 pounds. Measures 5 1/4" W x 4 1/2" H x 6 D inches.

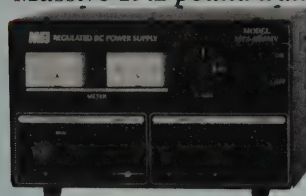
MFJ-4245MV, \$189.95. 45 Amps maximum or 40 Amps continuous. Weighs 5.5 pounds. Measures 7 1/2" W x 4 3/4" H x 9 D inches.

MFJ No Matter What™ Warranty

MightyLites™ are covered by MFJ's famous No Matter What™ one year limited warranty. MFJ will repair or replace (at our option) your power supply for one full year.

MFJ 35/30 Amp Adjustable Regulated DC Power Supply

Massive 19.2 pound transformer . . . No RF hash . . . Adjustable 1 to 14 VDC . . .



NEW!
MFJ-4035MV
\$139⁹⁵ AES PRICE

MFJ's heavy duty conventional power supply is excellent for powering your HF or 2 Meter/440 MHz transceiver and accessories.

A massive 19.2 pound transformer makes this power supply super heavy duty! It delivers 35 amps maximum and 30 amps continuous without even flexing its muscles. Plugs into any 110 VAC wall outlet.

It's highly regulated with load regulation better than 1%. Ripple voltage is less than 30 mV. **No RF hash** -- it's super clean!

Fully protected -- has over voltage protection, fold back short circuit protection and over-temperature protection.

You get front panel adjustable voltage from 1 to 14 VDC with a convenient detent set at 13.8 VDC. A pair of front-panel meters

let you monitor voltage and current.

Three sets of output terminals include a pair of heavy duty five-way binding posts for HF/VHF radios, two pairs of quick-connects for shack accessories and a covered cigarette lighter socket for mobile accessories.

A front-panel fuse holder makes fuse replacement easy. Whisper quiet fan speed increases as load current increases -- keeps components cool. 9 1/2" W x 6 H x 9 3/4" D inches.

Your MFJ-4035MV is protected by MFJ's famous No Matter What™ one year limited warranty. MFJ will repair or replace (at our option) your power supply for one full year.

MFJ High Current Multiple DC Power Outlets

Power two HF/VHF transceivers and six or more accessories from your 12 VDC power supply

AES PRICE
MFJ-1118
\$69⁹⁵



MFJ-1118, \$69.95. This is MFJ's most versatile and highest current *Deluxe Multiple DC Power Outlet*. It lets you power two HF and/or VHF transceivers and six or more accessories from your transceiver's main 12 VDC power supply.

Two pairs of super heavy duty 30 amp 5-way binding posts connect your transceivers. Each pair is fused and RF bypassed. Handles 35 Amps total. "ON" LED.

Six pairs of heavy duty, RF bypassed 5-way binding posts let you power your accessories. They handle 15 Amps total, are protected by a master fuse and have an

ON/OFF switch with an "ON" LED indicator.

Built-in 0-25 VDC voltmeter. You get 6 feet of super heavy duty eight gauge color-coded cable with ring tongue terminals. Binding posts are spaced for standard dual banana plugs.

Heavy duty aluminum construction. 12 1/2" x 2 3/4" x 2 1/2" inches.

MFJ-1116, \$44.95. Similar to MFJ-1118. No 30 amp posts. Has "ON" LED and 0-25 VDC voltmeter. 15 amps total.

MFJ-1112, \$29.95. Similar to MFJ-1116. No on/off switch, LED, meter, fuse.

MFJ-1116
\$44⁹⁵ AES PRICE



MFJ-1112
\$29⁹⁵ AES PRICE



Free MFJ Catalog
800-647-1800

<http://www.mfjenterprises.com> FAX: (601) 323-6551
• 1 year No Matter What™ warranty Add s/h

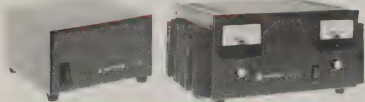
MFJ ENTERPRISES, INC.
P.O. Box 494, Miss. State, MS 39762
(601) 323-5869; 8-4:30 CST, Mon-Fri
Technical Help: (601) 323-0549

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MFJ . . . the world leader in ham radio accessories!

POWER SUPPLIES

ASTRON Power Supplies



The alternative to costly "matching" Supplies!

- 105-125V AC input, 13.8V DC output; internally adjustable from 11-15V • Electronic regulation with fold-back current limiting & crowbar overvoltage protection • Heavy-duty heat sink • 3-wire cord • 1-year Warranty • Made in U.S.A.

Separate volt & amp meters on RS-20M, 35M, 50M & 70M. Separate volt & amp meters, plus voltage adjustment (2-15V DC) on VS-20M, VS-35M & VS-50M. RM-35M, RM-50M & RM-60M are rack mount models.

Astron Model	Cont. Amps	ICS Amps	Size (in.) H W D	Shipping weight
RS-7A	5	7	3 1/4 x 6 1/2 x 9	9
RS-10A	7 1/2	10	4 x 7 1/2 x 10 1/2	11
RS-12A	9	12	4 1/2 x 8 x 10 1/2	13
RS-20A	16	20	5 x 9 x 11 1/2	18
RS-35A	25	35	5 1/2 x 11 x 11	27
RS-35A/220V	Same as RS-35A	but 220V input		169 ⁹⁵
RS-50A	37	50	6 x 13 1/2 x 12	46
RS-70A	57	70	6 x 13 1/2 x 12	48
With separate Volt & Amp meters				
RS-20M	16	20	5 x 9 x 10 1/2	18
RS-35M	25	35	5 1/2 x 11 x 11	27
RS-50M	37	50	6 x 13 1/2 x 11	46
RS-70M	57	70	6 x 13 1/2 x 12	48
Adjustable output; separate Volt & Amp meters				
VS-20ML	16	20	5 x 9 x 10 1/2	20
VS-35M	25	35	5 1/2 x 11 x 11	29
VS-50M	37	50	6 x 13 1/2 x 11	46
Rack mount models; separate Volt & Amp meters				
RM-35M	25	35	5 1/2 x 19 x 12	38
RM-50M	37	50	5 1/2 x 19 x 12	50
RM-60M	50	55	7 x 19 x 12	60

Models with Added Features

RS-4L Has a built-in cigarette lighter receptacle in the front panel. 13VDC @ 4A peak, 3 Amps continuous. 3 1/2" h x 6 1/2" w x 4 1/2" d, 6 lbs. **\$49⁹⁵**

RS-12S Power supply with built-in speaker. Rated 13VDC @ 12 Amps peak & 9 Amps continuous. 4 1/2" h x 8 1/2" w x 9 1/2" d, 13 lbs. **\$89⁹⁵**

Lightweight Switching Power Supplies

SS-25 12V DC, rated 20 Amps continuous, 25 Amps ICS. 3 1/2" h x 7 1/2" w x 9 1/2" d, 4.2 lbs. **\$129⁹⁵**

SS-25M As above, with volt/amp meters..... **\$149⁹⁵**

SS-30 12V DC, rated 25 Amps continuous, 30 Amps ICS. 3 1/2" h x 7 1/2" w x 9 1/2" d, 4 lbs, 8 oz. **\$149⁹⁵**

SS-30M As above, with volt/amp meters..... **\$169⁹⁵**

Power Inverters

General Purpose

1215V Converts 12V DC to 115VAC @ 60 Hz. Provides convenient AC house current in your boat, car, truck, camper, etc. Powers your ham rig, small household appliances, TV, tools, radios & lights up to 200W contin., w/peaks up to 240W & overload protected. Note: This unit produces square wave output, not recommended for devices where high transients are not tolerable. 4 1/2" h x 8 1/2" w x 9 1/2" d, 9 lbs. **\$69⁹⁵**

28V Aircraft

2412 Converts 22 to 32V DC input to 13.8V DC output @ 9 amps. Eliminates tapping into a 28V battery for 12V power **\$64⁹⁵**

2412-20 As above, but rated at 16 Amps **\$89⁹⁵**

DM-340MVT Power Supply



Input: 120V AC 50/60Hz
Output: 13.8V DC (0-15V adjustable)

Rated: 30A Cont./35A Max.
Voltage Regulation: Under 2%
Ripple Voltage: Under 30mV-p-p
Protection: Automatic Shutdown over 35A

- Volt & Amp Meters • Cooling Fan • Binding Posts • Quick connects • Cigar lighter socket • 9" w x 6 1/2" d, 19 lbs. **\$179⁹⁵**



Variable Power Supplies

RP-150 20 Amp Power Supply with the following features:

- 13.8V DC @ 20 Amps continuous • Adjustable voltage 2V to 15V DC • Internal Cooling Fan • Large, Lighted Volt and Amp Meters • Cigarette Lighter Socket with Cap • Binding Posts on Front and Rear

Ripple less than 3.1mV Peak to Peak • 8 1/2" w x 4 1/2" h x 7 1/2" d, 14 lbs. **\$159⁹⁵**

RP-300 30 Amp Power Supply, same as RP-150 but:

- 30 Amps continuous • Binding Posts & spring loaded Dual Terminals on front • Detachable power cord • 10 1/2" w x 5 1/2" h x 11 1/2" d, 24 lbs. **\$239⁹⁵**



Power Supplies Powerful Values for Ham Operators



105-125V AC INPUT, 13.8 VDC output; perfect for all your Ham radio equipment. A wide selection, including most popular sizes, rugged construction and low prices.

- Solid state, integrated circuitry
- Current-limiting foldback for complete over current protection
- Crowbar Overvoltage protection on 15 amp and larger models
- High quality filtering for very low ripple and low noise, metal cases on all models
- Regulated, output 95% of no-load value

Model#	Cont. amps	ICS	Size (in.)	Wt.	Price
PR-7	5	7	3 1/4 x 6 1/2 x 7 1/2	7	\$49 ⁹⁵
PR-10	7.5	10	4 1/4 x 6 1/2 x 7 1/2	10	69 ⁹⁵
PR-12	9	12	4 1/2 x 6 1/2 x 7 1/2	11	74 ⁹⁵
PR-20	16	20	4 1/2 x 6 1/2 x 7 1/2	15	99 ⁹⁵
PR-30	24	30	6 1/4 x 6 1/2 x 10 1/2	23	129 ⁹⁵
PR-40	32	40	6 1/4 x 10 1/2 x 11 1/2	27	169 ⁹⁵
PR-50	37	50	6 1/4 x 10 1/2 x 11 1/2	30	199 ⁹⁵
PR-60	48	60	6 1/4 x 10 1/2 x 11 1/2	33	239 ⁹⁵

PowerVerter® Ultra Compact Inverters

- Converts vehicle battery power to clean, safe & efficient AC power • Ultra compact design • Choice of 140w or 300w models



Plugs into vehicle cigarette-lighter socket. These Low Cost DC to AC Inverters give you access to AC power wherever you need it. Harnessing the 12-volt battery power of your automobile, boat, RV or service truck, they let you use power tools at an out-of-the-way work site, household appliances at a campsite, or office equipment on the road.

Features: Electronic Circuit Protection • Low Battery Alarm & Shutdown • Illuminated On/Off Switch Cigarette Lighter Plug • Metal Housing • Built-in High-Speed Cooling Fan (PV-300)

SPECIFICATIONS	PV-140	PV-300
Maximum Continuous Power	140W	300W
Surge Capacity (Peak Power)	200W	500W
Wave Form	Modified Sine Wave	
AC Receptacles	1	2
Size (L x W x D inches)	6x3x1 1/2	6x4x1 1/2
Weight	1 lb, 4oz	2 lbs
Price	\$49 ⁹⁵	\$74 ⁹⁵

MFJ Mighty lite™

Switching Power Supplies

- Super small • Super lightweight • Volt/Amp meters Front panel voltage control (0-15V) • Five-way binding posts & cigarette lighter socket on front panel

Two-sets of quick-connects on rear panel • Large 3" dual illuminated meters • Overvoltage & over current protection • Cooling Fan • Fused, switchable AC Input (85-135V & 170-260V AC)



4225MV

22 Amps continuous
25 Amps max. - 3.7 lbs
5 1/2" w x 4 1/2" h x 6 1/2" d
\$139⁹⁵



4245MV

40 Amps continuous
45 Amps max. - 5.5 lbs
7 1/2" w x 4 1/2" h x 6 1/2" d
\$189⁹⁵

4035MV Heavy-duty Conventional Power Supply

MASSIVE TRANSFORMER delivers 35 Amps max. & 30 Amps cont. with ease.



- Front panel adjust. voltage (1-14VDC) • Dual lighted volt and amp meters • Three sets of output terminals including a pair of heavy duty five-way binding posts & cigarette lighter socket • Internal cooling fan - speed increases as load current increases • Overvoltage, fold back short circuit protection and over-temp. protection • 9 1/2" w x 6 1/2" h x 9 1/2" d, 19.2 lbs. **\$139⁹⁵**

AIM Small Power Supplies

38-384 Light Duty DC Power Supply Input: 115V AC. Output: 13.8V DC regulated @ 4A Front panel binding posts, LED "ON" indicator, fuse protection. 7 1/2" d x 4 1/2" w x 3 1/2" h, 5 1/2 lbs. **\$39⁹⁵**



38-305 AC Adapter Provides multiple low-voltage DC to operate various battery powered equipment requiring 3, 4.5, 6, 7.5, 9 or 12V DC @ 500ma. Multiple application plugs and 9V snaps fit most devices. **\$9⁹⁵**

38-312 Regulated AC Adapter Multi-voltage with multiple plugs and 9V snaps. Provides 1.5, 3, 4.5, 6, 7.5, 9 or 12V DC regulated @ 1200ma. to operate a wide range of battery operated devices. **\$29⁹⁵**



RF Inquiry inc.

HI-Q Common-Mode™ Filters



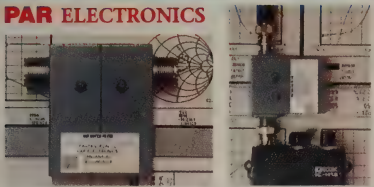
"Common-Mode" noise (differential noise) is energy transfer between a transmitter and the ground including everything which makes up the stray capacitance between them. Regular lowpass filters do well in eliminating harmonic-type interference but are not capable of filtering out "Common-Mode" noise.

For tough RFI problems and an overall cleaner signal, add the CF250E or CF5KV to your antenna system.

Operating Frequency.....1.8-70MHz	Connectors.....SO-239 teflon
Common Mode Attenuation -50 to -60db Below 250MHz	Size.....CF250E 25dia. x 255mm CF5KV 54dia. x 300mm
Power Rating.....CF250E 250W CF5KV 5,000W	Weight.....CF250E 0.5 lb. CF5KV 1.3 lb.
Insertion Loss.....Less than 0.1db	PRICE (CF250E-UHF) \$89⁹⁵
Impedance.....50Ω	(CF5KV-UHF) \$124⁹⁵

INTERMOD FILTERS

PAR ELECTRONICS



Solve most intermod or front end overload problems from paging systems with these small, asymmetrical, 45 to 54dB Notch Filters. The design is centered on the offending pager spectrum of 152 to 153 MHz and works effectively with a loss of 0.5 dB or less and a 1.25:1 VSWR. Works with dual-band (2m/70cm) transceivers providing low-loss pass-thru of 70cm signals.

VHFDN152 2m base or mobile intermod filter, SO-239 connectors, 50W. 2" h x 1" d x 2 1/2" w..... **\$62⁹⁵**

VHFTN152-158 Triple Cavity. Similar to VHFDN152 except it places a second notch in the 158MHz pager band in addition to the dual notch in the 152 MHz pager band. 2 1/2" h x 1" d x 3" w..... **\$82⁹⁵**

VHFDN152HT 2m Intermod filter for handhelds BNC connectors, 20W. 1 1/2" h x 3/4" d x 2" w..... **\$68⁹⁵**

UHFDN450 UHF Intermod filter for base or mobile. Blocks pagers/two way transmitters that cause 70cm intermod; transparent to 2 meters..... **\$62⁹⁵**

UHF-12 12' Belden RG-58/U jumper cable with silver/gold/teflon PL-259's on each end..... **\$9⁹⁵**

MFJ MFJ ENTERPRISES, INC. IntermodFighter™

Eliminate intermod in your 2M HT or mobile station. Three high-Q bandpass filters and two L-sections give razor sharp selectivity to knock out interfering signals below and above 2 meters.

MFJ-713 Has BNC connectors for use HTs. Self-contained, and uses a 9-volt battery. To eliminate intermod, remove the rubber duck and replace it with the MFJ-713. Re-install the duck - no more intermod! RF tight, rugged aluminum case..... **\$59⁹⁵**

MFJ-714 For mobile transceivers, SO-239 connectors. Installs between rig & antenna. Uses 12V DC..... **\$59⁹⁵**

MFJ-704 50Ω Low Pass Filter Installs between HF transmitter and antenna. Reduces TVI from harmonics, that fall in the TV band. 1kw from 1.8 to 30MHz, 3" w x 3" h x 9" d..... **\$39⁹⁵**

MFJ-711 75Ω High Pass Filter Installs at TV or VCR antenna input. Reduces or eliminates interference from HF transmitters operating below 30MHz..... **\$19⁹⁵**

NYE VIKING

Low Pass Filter

Install between transmitter and antenna to eliminate TVI caused by harmonics from 1.8-30MHz transmitters. Rated 2KW, 5KW SSB peak. Over -65dB attenuation above 57MHz. SO-239 connectors..... **020-001 \$56⁹⁵**

VECTRONICS

LP-30 Low Pass Filter

Suppress TV interference from HF transmitters. Use between transmitter and antenna or tuner. Up to -70dB attenuation of harmonics falling in TV bands. For 5Ω, up to 30MHz and 1500W RF continuous power..... **\$49⁹⁵**

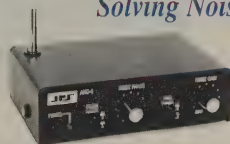
LP-2500 Rated for 2.5KW continuous..... **\$79⁹⁵**

HFP-1 High Pass Filter Install at TV antenna terminals stop interference caused by overload and harmonics from HF transmitters operating below 30MHz. High harmonic attenuation but low loss in 52 to 550MHz TV passband. For 300Ω, but baluns and Type F connector supplied for 75Ω. **\$19⁹⁵**



JPS Communications, Inc.

Solving Noise Problems with Digital Signal Processing!



Antenna Noise Canceller

Noise/Interference Reducer & Filter Unit



ANC-4 Installs between the antenna and receiver. Usable between 100 kHz and 80 MHz. Eliminates local POWER LINE noise before it enters the receiver to let you hear signals you didn't know were there. Two front panel adjustments, PHASE and GAIN, reduces locally-generated noise typically by 50 dB. Short whip and wire noise pick-up antennas supplied with each unit. Rear panel connector for external noise probe. Automatic transmit switch over, handles up to 250 watts, has internally selectable delay time. Europe CE certified. 12V DC @ 300 mA. 1 1/2" h x 6" w x 4 1/2" d, 2 lbs.... **\$189⁹⁵**

PowerPack 115V AC adapter for JPS units..... **\$16⁹⁵**

NIR-12 Features two 40 MHz DSPs to provide the most powerful and advanced DSP Noise Reduction Unit available. Unparalleled performance, super-selective FIR filters, fully adjustable filter center frequency & bandwidth (3400Hz-50Hz); both Dynamic Peaking AND Spectral Subtraction Noise Reduction; spectral multi-tone NOTCH filter. All modes & functions may be used simultaneously. Use on all modes, including AMTOR & PACTOR. Installs between the receiver audio output and external speaker. Europe CE certified. 12V DC @ 1A. 1 1/4" h x 6 1/2" w x 7 3/4" d, 4 lbs..... **\$349⁹⁵**

SDK-12 Software Development Kit. Interface module & software for programming of the NIR-12 DSP chips via the serial data bus on your PC..... **\$35⁹⁵**

K-COM Telephone RF Interference Filters



Stops telephone RFi caused by 3 to 30MHz transmitters! ...

Cure telephone RF interference in the most irritating cases even when dealing with transmitters with full legal power output. Use any number of filters with no adverse effect on telephone performance. Fully assembled, with complete installation instructions.

RF-1 For single line equipment including wired and cordless telephones, answering and fax machines, modems, etc. Standard modular connectors..... **\$16⁹⁵**

RF-1/2-line The correct filter for two-line telephone sets, and multi-line multi-station electronic key phone systems in business environments..... **\$22⁹⁵**

RF-1/coiled For use when RFi enters through the coiled telephone cord between base & handset..... **\$22⁹⁵**

RF-2 Hard-wired, provides a wide range of installation options to add RFi rejection at a variety of physical and electrical locations in the system wiring. Inside phone jacks, behind wall mounted telephones, security systems, etc..... **\$10⁹⁵**

Oak Bay Technologies

LP-11P Commercial Grade Low Pass Filter

Installs in the transmission line between transmitter and power amplifier or tuner. Eliminates TVI by filtering out transmitter generated harmonics that could fall within the TV bands. Eleven pole Inverse Chebyshev filter design operates from 1.8 thru 30MHz with less than 0.5dB insertion loss, an upper cutoff frequency of 41MHz and 80dB of ultimate attenuation. Maximum power handling is 1000W..... **\$69⁹⁵**

LP-50 Low Pass Filter for 1.8 thru 54MHz..... **\$69⁹⁵**



High Pass Filters Stop TV, FM & VCR interference caused by harmonics or overload from HF amateur radio transmissions, etc. Installs at TV or VCR antenna terminal or connector. Sharp frequency cutoff at 52MHz with 70dB attenuation below 50MHz.

HP-300T (300Ω) or **HP-75T** (75Ω).....ea. **\$12⁹⁵**

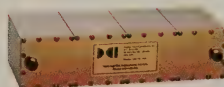
ZENITH High Pass Filter

Install at TV set and attach antenna lead. Eliminates interference coming from 6 to 160M transmitters. >45dB attenuation @ 52MHz & lower. For 75Ω systems, type-F connectors. 2" x 1 1/4" x 1". A-8477 **\$9⁹⁵**

CLOSEOUT



DCI DIGITAL COMMUNICATIONS



Bandpass Filters

Install between your 2m, 220 or 440MHz rig and antenna to reduce strength of out-of-band interfering signals while allowing signals you want to hear pass through at full strength.

- Eliminate random squeals, squawks, beeps & strange voices from your VHF radio caused by Intermod from strong, nearby pagers, police radio, etc. • Hear desired signals even in crowded urban centers with high-powered commercial systems. • Design: (2M/220MHz) (4) helical resonators with aperture coupling, (440MHz) (4) 1/4-wave linear resonators with aperture coupling VSWR 1.5:1 - rated at 200W. • Also reduces spurious emissions on transmit. • Made of extruded aluminum, copper and brass. 12W"x 3" h x 5" d, 2 lb, 11oz

146-4H Passband: 144-148; Loss <1 dB; Selectivity: -57dB @ 136MHz & -43dB @ 156MHz; SO-239 silver-terflon connectors..... **\$89⁹⁵**

145-2H - Passband 144 to 146 MHz..... **\$89⁹⁵**

223-5-3H - Passband: 222 to 225MHz; Loss 1 dB; Selectivity: -33dB at 233 3MHz and -28dB at 233 MHz; SO-239 silver-terflon connectors..... **\$89⁹⁵**

445-10C - Passband: 440 to 450MHz; Loss 1 dB; Typical selectivity: -47dB at 425MHz & -50dB at 456 MHz; Type-N silver-terflon-gold connectors..... **\$109⁹⁵**

435-10C - Passband 430 to 440MHz..... **\$109⁹⁵**

Upgrade to type-N connectors on 2m and 220MHz models - add \$10 to price; Special Order

MAHA

DOCKING BOOSTERS

With the appropriate adapter, you can slide on & boost your ICOM, KENWOOD or YAESU handheld radio up to 50W. Forget about the battery pack, the booster will power the HT at 5W. Also works with ADI & RADIO SHACK HTX-202.

MH-A301 • 2m FM, 5W in/50W out, 18dB GaAsFET preamplifier..... **\$115⁹⁵**

MH-A302 • Dual Bander - 2m 5W in/45W out; 440MHz, 5W in/35W out..... **\$165⁹⁵**

HT AMPLIFIERS

MH-A101 • 2m FM, 5W in/50W out **\$69⁹⁵**

MH-A102 • 2m FM/SSB, 5W in/35W out, 15dB GaAsFET preamplifier..... **\$89⁹⁵**

MH-A103 • 2m FM/SSB, 5W in/50W out, 15dB GaAsFET preamplifier..... **\$119⁹⁵**

MH-A104 • 2m FM/SSB, 5W in/100W out, 15dB GaAsFET preamp, adjustable..... **\$229⁹⁵**

MH-A201 • Dual Bander - 2m 5W in/45W out; 440MHz 5W in/35W out..... **\$159⁹⁵**

YAESU

QUADRA SYSTEM

HF & 6M

SPECIAL \$3999⁹⁵

- Amateur Band Coverage: 160-15 & 6 meters
- 1000W Power Out @ 220V AC 500W on 6-meters
- (8) MRF150 Power MOS FETs
- Multi-function Omni-Glow LCD Display
- Automatic System Monitoring with VSWR Protection
- Built-in High-Speed Antenna Tuner
- (2) RF inputs • (4) RF outputs
- Automatic Bandswitching with Yaesu's FT-1000D, FT-1000MP, FT-920 & FT-900
- (2) input voltages: 117VAC for 500W; 220V AC for 1000W
- Separate Amplifier and Power Supply Units
- Size: (each) 16" x 5" x 16"
- Weight: (Amp) 33 lbs; (Power Supply) 26 lbs

concept

VHF/UHF AMPS

- Single/Duobanders
- 12V DC
- FM/CW/SSB
- Receive preamplifier
- Overdrive protection

Model	input	output	amps
2-meters			
MAXAMP-10	10W	150W+	25
MAXAMP-45	40W	150W+	22
440MHz			
4-110	10W	100W	22
4-310	30W	100W	20
Mini-AMP			
440P	3W	20W	6

CLOSEOUTS



PW-1 HF/50MHz All Band Solid State Linear amplifier. 100W of drive delivers 1KW PEP SSB and 1KW CW/RTTY output (100% duty cycle). Automatic band change. Built-in automatic antenna tuner for all amateur bands including 6 meters. Wide ALC adjustable range allows use with almost any rig. Removable control head, full break-in CW operation. Built-in 110/220VAC supply with automatic input voltage selector. 14" w x 10" h x 14" d, 56 lbs..... **\$4999⁹⁵**

SGC

SG-500

SmartPowerCube™

A fully automatic band switching, microprocessor controlled HF linear amplifier. Covers 1.6-24MHz, ideal for fixed, mobile, & marine oper. Nearly indestructible! Cast-aluminum enclosure, extra heavy duty heat sinks, powder coat finish & durable electronic components. 500W PEP output with 50-90W input; CW rating 500W output for 10 min., or unlimited w/opt. fan. 10-18 VDC @ 40A average (SSB), 90A peak, or CW. 6" h x 12" d x 11 1/2" w, 21 lbs..... **\$2-96 \$999⁹⁵**



MIRAGE

VHF/UHF AMPLIFIERS

Add a MIRAGE amplifier to your rig for 30 to 600 watts of BRUTE POWER! Models for 6 meters through 70 cm - Base, Mobile, Repeater or ATV operation.

- 12V DC • FM/SSB/CW modes • Continuous duty
- 20dB GaAsFET preamp • Overdrive & High-temp protection • Remote control capability

Model	MHz	Max Input	Max out	amps	preamp
A-1015G	50-52	1-15W	150W	23	yes
B-34	144-148	8W	35W	4	no
B-34G	144-148	8W	35W	4	yes
B-55G	144-148	10W	50W	5	no
B-215G	144-148	0.25-5W	150W	20	yes
B-1016G	144-148	0.2-15W	160W	25	yes
B-1030G	144-148	10W	300W	48	yes
B-2516G	144-148	20-35W	160W	25	yes
B-2530G	144-148	10-35W	300W	48	yes
B-5016G	144-148	20-60W	160W	22	yes
B-5030G	144-148	0.5-50W	300W	48	yes
B-310G	144-148	0.25-8W	100W	15	yes
B-320G	144-148	2.5-50W	200W	25	yes
B-510G	144-148	2.5-50W	100W	15	no
BD-35	144/440	1-7W	45/35W	7	no
C-22G	222-225	2W	20W	5	yes
C-211G	222-225	2W	110W	20	yes
C-106G	222-225	10W	60W	12	yes
C-1012G	222-225	10W	120W	5	yes
C-1022G	222-225	10W	220W	20	yes
C-2512G	222-225	30W	120W	20	yes
C-2522G	222-225	30W	200W	42	yes
C-5022G	222-225	50W	200W	42	yes
D-15N	425-450	2W	15W	3	no
D-26N	430-450	2W	60W	12	no
D-1010N	430-450	10W	100W	15	no
D-3010N	430-450	30W	100W	20	no
D-1010ATV	430ATV	10W	100W	20	no

* at 28VDC N denotes Type-N connectors

RC-1 Remote Control Head. For most Mirage amps. Controls: Power and preamp On/Off, SSB/FM mode switch. 18 ft. cable. 1 1/2" x 3 1/2" x 2 1/2" **\$45⁹⁵**

Docking Boosters

Slide your handheld into a Mirage docking booster and your HT instantly becomes a powerful mobile or base!

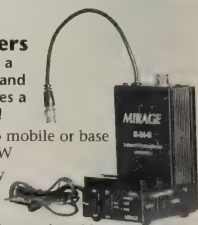
- Boost your RF power to mobile or base station levels, up to 50W
- Replace your HT battery
- Becomes a secure and convenient HT holder

Mirage docking boosters have selectable HT voltages that let you use most handhelds old or new. Requires 13.8 VDC. You can place it on your dashboard or table or mount it securely with its mounting bracket and tilt it for convenient operation.

B-24-G For 2m FM handhelds. Delivers up to 50W output with just 0.5 to 8W input. Has 18dB GaAsFET preamp with on/off switch. Preamp On, On Air, and Transmit LEDs. Compact - 3 1/2" x 3 1/2" x 4 1/2". Choose an adapter to fit your handheld* **\$114⁹⁵**

BD-25 For dual band FM HTs. Delivers up to 45W on 2M and 35W on 440MHz with only 0.5 to 8W input. Mirage's FullDuplexAMP™ lets you talk on one band and listen on the other band at the same time. Requires compatible HT. Automatic band selection. Frequency Band and Power On LEDs. Reverse polarity protection, On/Off switch. 3 1/2" x 3 1/2" x 5 1/2". Choose an adapter to fit your handheld* **\$164⁹⁵**

* See Mirage in the Price List for HT adapters, and also a listing of Mirage Repeater Amplifiers.



To: **AMATEUR ELECTRONIC SUPPLY®**

5710 W. Good Hope Road
Milwaukee, WI 53223

I am interested in the following NEW Equipment:

I have the following to TRADE:

Name _____ Call _____

Address _____

City/State _____ Zip _____

We WANT your Trade-in!

AES has the finest stock of Used Gear anywhere, and we are always looking for Clean, Late Model SSB & FM Gear to take in trade.

Look over the gear in this catalog, then call or use this Handy Coupon to tell us what you have to trade and we'll send you a quote.

We have 100's of used items in stock, and the inventory changes everyday. Our WEB site has a complete up-to-date list, or call Toll Free.

www.aesham.com
help@aesham.com
1-800-558-0411

AMERITRON... 800 Watts... \$729⁹⁵

Ameritron gives you four 811A tubes, 800 watts and far better quality -- for less money -- than a competitor's 3 tube 600 watt unit... Why settle for less power, less quality and pay more money?



AL-811H
\$729⁹⁵
AES PRICE

AL-811
\$599⁹⁵
AES PRICE

Kilowatt Amplifier



AL-80B
\$1149⁹⁵
AES PRICE

Full kilowatt PEP output from a whisper quiet compact desktop linear. Only 8 1/2 x 14 x 15 1/2 inches. Plugs into nearest 120 VAC outlet. All bands 160-15 Meters, 1000 Watts out on SSB, 850 watts out on CW, genuine Amperex 3-500ZG tube has graphite plate, nearly 70% efficiency, inrush current protection, multi-voltage transformer.

Only the Ameritron AL-811H gives you four fully neutralized 811A transmitting tubes. You get absolute stability and superb performance on higher bands that can't be matched by un-neutralized tubes.

Ameritron mounts the 811A tubes vertically -- not horizontally -- to prevent hot tube elements from sagging and shorting out. Others, using potentially damaging horizontal mounting, require special 811A tubes to retard sagging and shorting.

A quiet, powerful computer grade blower draws in

Near Legal Limit™ Amp
AL-572
\$1299⁹⁵
AES PRICE



New class of Near Legal Limit™ amplifier gives you 1300 Watt PEP SSB power output for 65% of price of full legal limit amps! Four rugged Svetlana Russian 572B tubes. Instant 3-second warm-up. Plugs into 120 VAC. Compact 8 1/2 x 15 1/2 x 14 1/2 W. 160-15 Meters, 1000 Watt CW output. Tuned input, instantaneous RF Bias, dynamic ALC, parasitic killer, inrush protection, two lighted Cross-Needle meters, multi-voltage transformer.

plenty of cool air. It pressurizes the cabinet and efficiently cools your 811A tubes. Our air flow is so quiet, you'll hardly know it's there -- unlike noisy, poorly chosen blowers.

You also get efficient full size heavy duty tank coils, full height computer grade capacitors, heavy duty high silicon core power transformer, slug tuned input coils, operate/standby switch, transmit LED, ALC, dual meters, QSK compatibility with QSK-5 plus much more.

AL-811 has three 811A tubes and gives 600 Watts output for only \$599.95.

AMERITRON offers the best selection of legal limit amplifiers

AMERITRON's legal limit amplifiers use a super heavy duty Hypersil® power transformer capable of 2500 watts!

Ameritron's most powerful Linear

AL-1500
\$2399⁹⁵
AES PRICE

Ameritron's super powerful amplifier uses the herculean Eimac® 8877 ceramic tube. It's so powerful that 65 watts drive gives you the full legal output -- and it's just loafing because the power supply is capable of 2500 Watts PEP.

Ameritron's 3CX1200A7 linear Amp

AL-1200
\$1969⁹⁵
AES PRICE

Get ham radio's toughest tube with the Ameritron AL-1200 -- the Eimac 3CX1200A7. It has a 50 watt control grid dissipation. What makes the Ameritron AL-1200 stand out from other legal limit amplifiers? The answer: A super heavy duty power supply that loafs at full legal power -- it can deliver the power of more than 2500 watts PEP two tone output for a half hour.

Ameritron's dual 3-500 linear

AL-82
\$1899⁹⁵
AES PRICE

This linear gives you full legal output using a pair of 3-500s.

Most competing linears using 3-500s can't give you 1500 watts because their lightweight power supplies can't use these tubes to their full potential.

AMERITRON HF Linear Amps with Eimac™ 3CX800A7



AL-800H
\$2049⁹⁵
Two tubes
1500 Watts plus

AL-800
\$1429⁹⁵
Single tube
1250 Watts

AMERITRON's new 800/H amplifiers cover 160-15 Meters including WARC bands. The AL-800 has a single Eimac™ 3CX800A7 tube and produces 1250 Watts PEP. The AL-800H has two 3CX800A7s giving 1500 Watts plus.

Both amps have an adjustable slug tuned

input circuit, grid protection, ALC control that is front panel adjustable, vernier reduction drives, heavy duty 32 pound grain oriented silicone steel core transformers and high capacitance computer grade filter capacitors.

These amplifiers have multi-voltage operation (14 user selectable AC line voltage from 90-140; 200-250 VAC), quiet pressurized ventilation systems, dual illuminated Cross-Needle meters that read peak forward and reflected power, SWR, high voltage, grid current and plate current.

Vernier reduction drives make tuning adjustments smooth and easy. Ameritron's exclusive Step-Start Inrush Protection™ stops damage to your amplifier from inrush current. Ameritron amps feature an attractive Lexan front panel decal and superior, all metal construction -- it's built to last! Ultra compact desktop size is perfect for your operating station. 8 1/2 x 16 1/2 x 14 1/4".

AMERITRON no tune Solid State Amplifiers

Ameritron ALS-500M Mobile no tune Solid State Amp has 500W out, covers 1.5-22 MHz



ALS-500M
\$699⁹⁵
Ideal Mobile amplifier
AES PRICE -- uses

13.8 Vdc mobile electrical system, very compact 3 1/2 x 9 x 15 in., extremely quiet, 500W output, 1.5-22 MHz coverage, instant bandswitching, no tuning, no warm up, no tubes, SWR protected.

Ameritron ALS-600 no tune Solid State base amp includes heavy duty power supply, 600 Watts out



ALS-600
\$1129⁹⁵
AES PRICE

No tuning, no fuss, no worries -- just turn it on and operate. Includes AC power supply, 600 W output, continuous 1.5-22 MHz coverage, instant bandswitching, fully SWR protected, extremely quiet, very compact. Amp is 6x9 1/2 x 12 inches.

AMERITRON brings you the finest high power accessories!

RCS-8V Remote Coax Switch... \$139⁹⁵

Replace 5 coax feedlines with a single coax. 1.2 SWR at 250 MHz. Useable to 450 MHz. 1kW at 150 MHz. RCS-4, \$129⁹⁵ 4 position remote HF switch.

ADL-1500 Dummy Load with oil... \$59⁹⁵

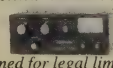


Oil cooled 50 ohm dummy load handles 1500 W for 5 minutes. SWR under 1.2 up to 30 MHz. Low SWR to 400 MHz.

ICP-120/240-79⁹⁵

Stops power-up inrush current and absorbs momentary high voltage spikes to your amplifier. ICP-120 for 110-120V, ICP-240 for 220-240 V.

ATR-15 Legal Limit Antenna Tuner... \$369⁹⁵



Designed for legal limit amplifiers! Covers 1.8-30 MHz, peak reading SWR/Wattmeter, 6 pos. antenna switch, 1:1 or 4:1 balun.

ARB-702 K/Y/I amp-to-radio interface... \$39⁹⁵



Protects your costly transceiver from damage by keying line transients, steady state current and excessive voltages.

QSK-5 Pin Diode T/R Switch... \$329⁹⁵



Self-contained, connects externally to most HF amps. Handles 2.5 KW PEP, 2 KW CW. Six times faster than vacuum relay. 6x4x9 1/2 in.

ATP-100 Tuning Pulser lets you safely tune your amplifier... \$49⁹⁵



Pulse tuning lets you safely tune up your amplifier for full power output and best linearity. Keeps average power to low safe level to prevent overheating, tube damage, power supply stress and premature component failure.

ADL-2500 2500 Watt fan cooled dry dummy load... \$189⁹⁵



Whisper quiet fan. Handles any legal limit amplifier -- 2500 Watts average power for 1 minute on, ten off. 300 Watts continuous. SWR below 1.25 to 30 MHz and SWR below 1.4 to 60 MHz.

... the world's high power leader!

AMERITRON®

... the world's high power leader

116 Willow Road, Starkville, MS 39759
TECH (601) 323-8211 • FAX (601) 323-6551

8 a.m. - 4:30 p.m. CST Monday - Friday
For high power amplifier components, call (601) -323-8211
Web Site... <http://www.ameritron.com>

Free Catalog: 800-713-3550
Call AES for best price and immediate delivery!

MIRAGE ...160 Watts on 2 Meters!

Turn your mobile, base or handheld into 160 Watt powerhouses and talk further, longer, clearer ... All modes: FM, SSB, CW ... Superb GaAsFET preamp ... More!

B-5016-G
\$269⁹⁵
AES PRICE



Power Curve -- typical B-5016-G output power

Watts Out	130	135	140	145	150	155	160	160+
Watts In	20	25	30	35	40	45	50	55

The MIRAGE B-5016-G gives you 160 watts of brute power for 50 watts input on all modes -- FM, SSB or CW!

Ideal for 20 to 60 watt 2 Meter mobile or base. Power Curve chart shows typical output power.

Hear weak signals -- low noise GaAsFET preamp gives you excellent 0.6 dB noise figure. Select 15 or 20 dB gain.

B-5016-G has legendary ruggedness. We know of one that has been in constant use since 1979!

Heavy-duty heatsink spans entire length of cabinet -- prevents overheating. Power transistors protected by MIRAGE's Therm-O-Guard™.

Fully protected from high SWR and excessive input power. Has warning LED.

Has smooth adjustable Transmit/Receive

switching with remote external keying.

RC-1, \$45.95, Remote Control. On/Off, pre-amp On/Off, selects SSB/FM. 18-ft cable.

Draws 17-22 amps at 13.8 VDC. 12x3x5 1/2 in.

More 160 Watt, 2 Meter Amplifiers ...

B-2516-G, \$269.95. For 10 to 35 watt mobile or base stations. 160 watts out for 25 watts in.

B-1016-G, \$339.95. MIRAGE's most popular dual purpose HT or mobile/base amplifier. 160 watts out/10 W in. For 0.2-15 watt transceivers.

B-215-G, \$339.95. MIRAGE's most popular handheld amp. 150 watts out/2 watts in; 160 watts out/3 1/2 W in. For 0.25 to 5 watt HTs.

B-1016-G
Great for ICOM
IC-706!

144/440 MHz Amp 45/35 Watt Dual Band

BD-35
\$149⁹⁵
AES PRICE



Power Curve -- typical BD-35 output power

Watts Out (2 Meters)	30	40	45	45+	45+	45+	45+
Watts Out (440 MHz)	16	26	32	35+	35+	35+	35+
Watts In	1	2	3	4	5	6	7

- 45 Watts on 2 Meters/35W on 440 MHz
- Auto Band Selection
- Full Duplex Operation
- FREE mobile bracket
- Single connector for dual band radios
- Reverse polarity protection
- Works with all FM handhelds up to 7 watts
- Auto T/R Switch • "On Air" LEDs
- 5x1 1/2 x 5 inches

6 Meter Amplifier (50-54 MHz)

FCC Type Accepted



The A-1015-G, \$349.95, is the world's most popular all mode FM/SSB/CW 6 Meter

amplifier. 150 watts out for 10 in. For 1 to 15 watt transceivers.

35 Watts for 2 Meter HTs

B-34-G
\$89⁹⁵
AES PRICE



- 35 Watts Out-2 M • All modes: FM, SSB, CW
- 18 dB GaAsFET preamp

- Reverse polarity protect • Works w/HTs to 8W
- B-34 ... 35 W, FM only, less preamp ... \$69.95

Low noise GaAsFET preamps

High gain ultra low noise GaAsFET preamps for receiving weak signals. Selectable gain prevents receiver intermod. 15 to 22 dB gain. Less than 0.8 dB noise figure. Automatic RF switching up to 160 Watts. Choose In-Shack model or Mast-Mount (includes remote control) model to reduce loss. Rugged die-cast enclosure.

Frequency (MHz)	In Shack	Mast Mount
	\$129.95	\$179.95
28-30	KP-1/10M	KP-2/10M
50-54	KP-1/6M	KP-2/6M
144-148	KP-1/2M	KP-2/2M
220-225	KP-1/220	KP-2/220
430-450	KP-1/440	KP-2/440

100 Watts for 2 Meter HTs

B-310-G
\$179⁹⁵
AES PRICE



Power Curve -- typical B-310-G output power

Watts Out	25	50	75	95	100	100+	100+
Watts In	1/4	1/2	1	2	4	6	8

- 100 Watts out with all handhelds up to 8 watts
 - All modes: FM, SSB, CW
 - Legendary Mirage Ruggedness
 - 15 dB low noise GaAsFET preamp
 - Reverse polarity protection/SWR Protection
- One Year Mirage Warranty**
- Commercial Amplifiers • 223-225 MHz
 - 420-450 MHz • SWR Wattmeters
- Free Catalog: 800-647-1800**

MIRAGE

COMMUNICATIONS EQUIPMENT
300 Industrial Park Road
Starkville, MS 39759, USA

Technical: 601-323-8287 Fax: 601-323-6551
<http://www.mirageamp.com>

VECTRONICS®

... the finest amateur radio products made!

World's most versatile 300W Antenna Tuner



VC-300DLP You'll get everything you've ever wanted ... precise inductance control that rivals roller inductors ... the ability to match any real antenna ... full 1.8-30 MHz coverage ... peak reading backlit Cross-Needle Meter ... 8 position antenna switch ... built-in 50 Ohm dummy load ... finest components available and world class quality.

More Fine Amateur Products

- AT-100 Tuned Active SWL Antenna ... \$79.95
- CK-200 Deluxe CW Keyer w/Curtis chip ... \$79.95
- DL-300M 300 Watt Dry dummy load ... \$34.95
- DL-650M 1500 Watt Dry dummy Load ... \$64.95
- DL-2500 2500 W dry DL w/cooling fan - \$179.95
- VC-300M 300 Watt Mobile Tuner ... \$99.95
- VC-300D 300 W Tuner/w digital graph - \$179.95
- HPF-1 High Pass TVI filter 52-550 MHz ... \$19.95
- HPF-2 Deluxe high pass TVI filter ... \$24.95
- PM-30HF 1.8-60 MHz SWR/Wattmeter ... \$79.95
- PM-30UV 144/220/440 SWR/Wtmtr ... \$89.95
- LP-30 Low Pass filter, handles 1500 Watts ... \$49.95
- LP-2500 Low pass filter, 2500 Watts ... \$79.95
- PS-30F 25 amp power supply, 30A surge ... \$129.95
- PS-50F 35 amp power supply, 50A surge ... \$199.95

3 KW Roller Inductor Antenna Tuner with SSB Digital Bar Graph



HFT-1500 The VECTRONICS HFT-1500 has three continuously variable components -- two 4.5 kV capacitors and a roller inductor controlled by a precision crafted crank handle and a gear driven 5-digit counter. Tune any antenna 1.8-30 MHz. Lighted D'Arsonval Cross-Needle SWR/Wattmeter, 28 uH roller inductor, 4:1 2.5 kW balun and 20 segment SSB bar graph display.

VECTRONICS, 1007 Hwy 25 S, Starkville, MS 39759 • Free Catalog 800-363-2922

• Tech: 601-323-5800 • FAX: 601-323-6551 • Visit our Web Site: <http://www.vectronics.com>

Full Line of *quality* Handheld Accessories...

UNIVERSAL CHARGER

MH-C777 *Universal* Rapid Charger

Conditioner

- ✓ Will charge **nearly any type of rechargeable NIMH and NiCD battery pack!**
- ✓ Will **discharge** and **condition!**
- ✓ Latest **-dV** and **temperature** Detection
- ✓ Support **4.8-12V**
- ✓ For mobile and base use!
- ✓ **Free car adapter included!**

Charge nearly all of your amateur radio battery packs with it, plus more.....
Cellular, Notebook Computer, Two-Way Radio, and more!

The breakthrough adjustable contacts make it truly universal!

The MH-C777 will not only charge your battery but also condition it!

External magnetic temperature probe!

Powerful magnet that will hold your battery pack in place!



1000mAh



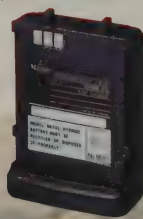
MH-PB-34
For Kenwood TH-79/22/42
900mAh, 9.6v

1800mAh



MH-FNB-V47
For Yaesu FT-50R/10R/40R
1800mAh, 7.2v

1000mAh



MH-BP-180
For Icom T7A/T22A/W32
1000mAh, 7.2v

NiMH BATTERY PACKS

- ✓ **New technology**
- ✓ **No** memory effect
- ✓ 50-100% **more** capacity than same size NiCad
- ✓ **Light** weight
- ✓ Flat Discharge Curve
- ✓ **Small** Size
- ✓ Environmental **friendly**
- ✓ Many **other** models available
- ✓ **One** Year Limited Warranty for all battery packs

MAHA

*"Your Supplier, Your Partner,
Your Friend!"*

MISCELLANEOUS ACCESSORIES

MFJ MFJ ENTERPRISES, INC.

MFJ-281

Communications Speaker (left)

Features a top-grade 3-inch Mylar cone speaker mounted in a well designed baffle. Improved speech intelligibility in 600 to 4000Hz frequency range while reducing undesirable noise, static and hum. 3/4" x 3" x 2 1/4" **\$9⁹⁵**

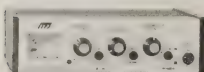
MFJ-280 Compact Mobile Speaker (right) Superb audio & convenience w/magnetic swivel base. Rated at 3W, matches 4/8Ω impedances. Has a 30" cord with 3.5mm mono plug, 2 1/2" x 2" x 3" **CLOSEOUT \$19⁹⁵**

MFJ-382 Deluxe ClearTone™ Amplified Speaker

An excellent 1-watt amplified speaker for QRP'ers, base station HT users or for operation with rigs requiring more volume. A quality 3-inch speaker provides loud, powerful audio. Volume adjusts from barely audible to high. All metal cabinet, rubber feet and vinyl clad cover. uses 9V battery (not included) or 110V AC with the optional MFJ-1312B (\$12.95). Connecting cable included. 3 1/2" x 1 1/2" x 4 1/2" **\$39⁹⁵**



MFJ-701 RFI Free Choke Kit Eliminate common RFI problems by simply winding offending cables around an RFI suppressing toroid. Includes four ferrite toroids, effective from .5 to 200 MHz. Each toroid separates into halves for easy winding on all types of cable, including computer ribbon, TV coax, power cord, telephone wire, audio and video cables. The halves mount in a snap-together plastic frame. For severe RFI problems and for larger cables, multiple toroids can be stacked for more effect. **\$14⁹⁵**



MFJ-624D Deluxe Hybrid Phone Patch

Interfaces telephone line with your rig. run phone patches. Easy to use, jumper selectable for all Kenwood, Icom, Yaesu and Alinco using an 8-pin microphone connector. Adapts to work with virtually any rig. Uses 12VDC, 9V battery or 110VAC with MFJ-1312B AC adapter (\$12.95). 8" x 2" x 6" **\$119⁹⁵**

MFJ-931 Artificial Ground Unit

Eliminates the problems caused by an inadequate ground system when using random lengthwire antennas. Resonates an additional length of wire to act as a tuned counterpoise. Easier tuning, improved efficiency and a better radiation pattern. Covers 1.8 to 30MHz, RF ammeter tuning indicator. 7 1/2" x 3 3/4" x 7" d. Not for antennas fed with coaxial cable. **\$79⁹⁵**



MFJ-1118 Deluxe Multi DC Outlet Connects to a battery or power supply and provides power distribution to multiple devices. Two pair of heavy-duty 30 Amp, 5-way binding posts for transceivers/amplifiers. Individually fused and RF bypassed, rated 35 Amps total. Also, (6) pair of RF bypassed 5-way binding posts for accessories, 15 Amps total, master fuse. ON/OFF switch, LED power indicator, 0-25V DC voltmeter. Post spacing for dual banana jacks Includes 6 ft. of 8 gauge cable with terminals. 12 1/2" x 2 1/2" x 2 1/2" **\$69⁹⁵**

MFJ-1116 Similar to MFJ-1118 but without 30A posts. Provides (8) RF bypassed 5-way binding posts. Voltmeter, ON/OFF switch and fuse. **\$44⁹⁵**

MFJ-1112 Similar to MFJ-1116 but with (5) posts, no voltmeter or ON/OFF switch **\$29⁹⁵**



STARTEK

Micro B&W Video Camera

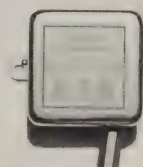


A miniature B&W TV camera with 1/3" CCD element providing 380 TV lines resolution. Features a pin-hole lens and a built-in microphone. Only 1 1/2" x 1 1/2" x 3/4", it can be placed inside or behind objects with only a small hole required. Infra-Red sensitive so it can see in total darkness when "IR" illumination is provided. Output is standard NTSC composite or base line video, 1 Volt P-P into 75Ω via an 18" cable with RCA plugs which can be plugged directly in to any VCR or TV monitor. Works up to 300 ft. with proper extension cables. AC adapter supplied, requires only 9VDC @ 100mA., will work for a couple of hours on a 9V Alkaline battery. **CAM-PHA-AES \$136⁹⁵**



NCG Power Pocket

Provides portable power for Emergencies, Hamfests, Hiking, etc. The 12V @ 2 amp/hour sealed lead-acid rechargeable battery provides talk time, up to 6 times longer than standard packs. It recharges completely in 6 to 8 hours, with the supplied charger; Partial discharges can be recharged to 100% without the usual ni-cad memory effect. Radio conveniently plugs into included female adapter socket. Contained in a compact carrying case with a belt loop and shoulder strap. 3 1/2" x 1" d x 6 1/2", 30 oz **\$66⁹⁵**

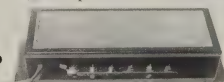


OAK BAY Technologies

BS-25 Automatic Battery Saver Module

Stops radio equipment from draining your car battery and prevents unauthorized use. Installs between your radio and car battery. Automatically turns on power when you turn the ignition on and removes power 4 to 8 minutes after turning the ignition off. Handles up to 25 Amps draw at 14.8V DC. Plated steel enclosure, 2" x 4" x 1 1/4", fused power lead **\$39⁹⁵**

High Power Current Strip



Make just one connection to your battery or power supply and distribute the power to multiple devices. Perfect for multiple HF/VHF radios or other high current equipment in the hamshack.

PS-612M Heavy-duty construction and high current capability. Provides six outputs with circuit breakers. Three outputs are rated at 30 Amps and three at 20 Amps. Rated for 50 Amps total current. Steel housing. Comes with 4 feet of #8 gauge wire and lugs... **\$64⁹⁵**



Svetlana
ELECTRONIC DEVICES

Popular Transmitting Tubes

4CX250B.....	\$105 ⁹⁵	572B.....	\$86 ⁹⁵
4CX400A.....	\$140 ⁹⁵	811A.....	\$25 ⁹⁵
4CX800A.....	\$190 ⁹⁵	8874.....	\$335 ⁹⁵

572B & 811A are in Stock, others are Special Order



THE POUCH

A protective carrying-case for handhelds made of black nylon bonded to bouncy neoprene. Includes a quick release, snap-out belt-loop clasp and a "bungee-type" parachute-cord restraining-strap secured on the front with velcro. A foam block bumper in the bottom can be easily removed to accommodate larger batteries.

Make/Model	Pouch #	Price
ADI		
201/401/600	T-2A	\$17 ⁹⁵
201/401/600 (HP)	S-1	\$17 ⁹⁵
ALINCO		
G1/GST	P-5	\$17 ⁹⁵
S11/41	P-5	\$17 ⁹⁵
190/191	Slim	\$17 ⁹⁵
CHEROKEE		
AH-50	T-2A	\$17 ⁹⁵
ICOM		
2GXAT	S-1	\$17 ⁹⁵
21/41A	P-5	\$17 ⁹⁵
Q7	S08	\$14 ⁹⁵
T2A	T-2A	\$17 ⁹⁵
T7A	P-5	\$17 ⁹⁵
T8A	S10	\$14 ⁹⁵
T22A/42A	P-5	\$17 ⁹⁵
W32	S-2	\$17 ⁹⁵
KENWOOD		
TH22 (3W)	SS	\$17 ⁹⁵
TH22 (5W)	Slim	\$17 ⁹⁵
TH79 (2.7W)	S-1	\$17 ⁹⁵
TH79 (5W)	S-2	\$17 ⁹⁵
TH235A	S-2	\$17 ⁹⁵
THG71A	G-71	\$17 ⁹⁵
UBX-LFI(FRS)	P-4V	\$14 ⁹⁵
STANDARD		
108A/508A	S08	\$14 ⁹⁵
S10	S10	\$14 ⁹⁵
156/168/178A	P-5	\$17 ⁹⁵
288A	Slim	\$17 ⁹⁵
568A/628A	P-5	\$17 ⁹⁵
YAESU/VERTEX		
FT10/40/SOR	10R	\$14 ⁹⁵
FT11/41R	P-5	\$17 ⁹⁵
FT51R	SS	\$17 ⁹⁵
VX1R	1R	\$14 ⁹⁵
VXF1 (FRS)	XF-1	\$14 ⁹⁵

ChestPOUCH

An alternative to belt clips or stuffing your valuable HT into a pocket.

- A combination of heavy, double-ply black cordura covering a plastic chest plate provides durability, pliability and toughness.



- Tough, resilient nylon-covered neoprene for radio and battery holders
- Fully adjustable harness
- Pen or penlight holder
- Large back pocket for maps, manual, etc.

Only for radios which will fit POUCH models SS, S1 or S3, above.CHEST B/S **\$29⁹⁵**

We now have a
SECURE eb site
Order on-line at www.aesham.com

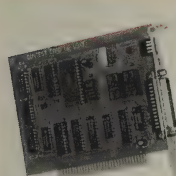


BC Series Battery Backup Systems Offering complete protection against surges, line noise, brownouts and blackouts. Tripp Lite uninterruptible power supplies keep your computer & Ham Radio equipment running in an emergency. Long lasting batteries give you up to 17 minutes backup time for 486/Pentium PCs.

Isobar - the World's Most Advanced Surge Suppressors. They provide instantaneous (0ns) response to power surges. Isolated filter banks eliminate connected equipment interference "Cascade circuitry" provides increased surge protection and diagnostic LEDs.

BC Internet models have RJ-11 jacks for complete Fax/Modem protection.

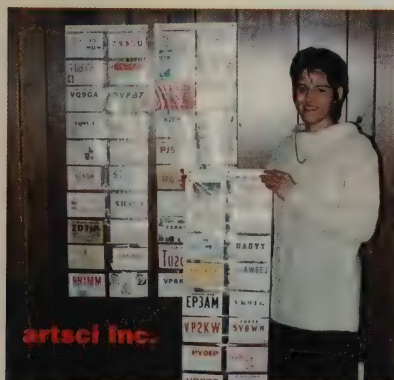
Various Models: See Tripp Lite in the Price List



UNIFIED MICROSYSTEMS W9XT Contest Card for IBM PC & PC Compatible

A non-volatile 5" x 4 3/8" card that plugs into a single 8-bit PC slot and provides voice recording, playback and CW keying. Stores 16 seconds of high quality and natural sounding voice audio sampled at 8 kHz, which can be partitioned between four messages of different lengths. Does not use any disk space. On CW, the card frees up the PC port, and a relay allows operation with positive or negative-keying. Works w/all rigs & is compatible w/most popular logging programs..... **\$149⁹⁵**

Contest Card Cable Semi-kit Comes wired & tested except for connectors to microphone & transmitter. Includes 6 ft. shielded cable, CW keying line and record switch (4 or 8 pin avail.) **CCC-4, CCC-8 \$44⁹⁵**

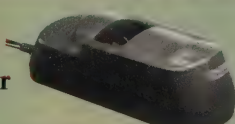


Q-View QSL Card Holders

Proudly display your favorite QSL cards in these 12" x 40" clear plastic hang-up holders. Each holds (20) 3-1/2" x 5-1/2" cards. Packets open at center to receive cards easily

Package of 3 (frames & displays 60 cards) - **\$12⁹⁵**

KENWOOD BC-15A Desk Charger CLOSEOUT



Charges Kenwood PB-13, PB-14, PB-17 & PB-18 handheld batteries in 60 to 100 minutes.

BC-15A looks similar to model pictured.

\$29⁹⁵ While they Last!



SS-100 Convenient, avoid theft! Radio slides in and out of mount instantly without having to attach or remove cables. The power, ground, antenna, and speaker leads connect and disconnect automatically! RF components are designed for a low SWR up to 500MHz. Adapts to most radios; the bracket adjusts to case size and can be conveniently attached above or below the radio unit..... **\$69⁹⁵**
SS-101 Extra base for multiple vehicle use **\$42⁹⁵**

AES Specialty Items - CLOSEOUT

SC-192 Portable Multi-function Work Light - **\$9⁹⁵**

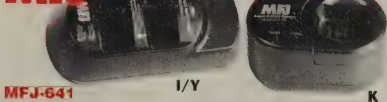
- 12V DC, On/Off switch
- Powerful magnetic mount
- Built-in tripod stand with adjustable tilt

SC-193 12 Volt DC High-Powered Car Vac - **\$9⁹⁵**

- Removable, washable filter
- Includes crevice tool for accessing tight areas
- 10 ft. car cord
- High powered motor

SC-784 12V Portable Handheld Spotlight with Tripod - **\$12⁹⁵**

- Quartz halogen; 5" reflector-400,000 candle power
- 8 ft. cord with lighter plug
- High-impact ABS handle conceals foldable tripod for emergency use



MFJ-641 I/Y K
RapidBattery™ Universal Chargers

Provides both quick and trickle cycles and will charge NiCd or NiMH battery packs. Unique circuitry with LED indicators determines when the battery is fully charged and prevents damaging overcharging. Universal interchangeable charging slots for fast, simple drop-in charging. 3 3/8" x 5 3/8" x 3" **\$49⁹⁵**

- MFJ-641I2 works with ICOM batteries BP-131/BP-132 • MFJ-641I3 - ICOM BP-173/BP-180 • MFJ-641Y2 - YAESU FNB-10/11/12/17/27 • MFJ-641Y3 - YAESU FNB-31/FNB-33 • MFJ-641Y4 - YAESU FNB-40/41/49, FNB-V47 • MFJ-641K - KENWOOD PB-67/8/9/11/30/32/33/34, KNB-5/6/7/5A/6A/7A/9A

MFJ-315 Jaws Gripmatic™

Adjustable, foam padded jaws lock an HT in place & secure it for the bumpiest rides. Protects any HT or cell phone from damage. Release button lets you quickly take your HT with you. Adjustable Flex-Neck™ provides convenient positioning. Powerful suction cups firmly mount Jaws Gripmatic™ to a car window. & tabs provide quick release **\$14⁹⁵**

GROTHE Sirens & Horns

VS-2 Emergency Vehicle Siren

Designed for the Volunteer Fireman, a quality built Wail-Yelp alarm that delivers big sound performance - 120Db sound level at 4 ft. Frequency range: 600 to 1200Hz. Pre-wired with a 3-position switch (Yelp-Off-Wail), high efficiency waterproof horn speaker, 10' ft. cable, mounting bracket & hardware. 12VDC @ 1.5A, 2.7 lbs..... **\$89⁹⁵**

VS-3 Vehicle P/A and Airhorn with Broadcast

A big, powerful airhorn sound with four different sounds (no siren) calls attention to your vehicle. Delivers 120 Db level at 4'. Locking down the microphone with the supplied rubber band, you can monitor sound from a mobile rig, scanner, etc. via the speaker outside. Includes horn speaker, mic, electronic center, 10' cable, mounting bracket & hardware. 12 VDC @ 1.5A **\$129⁹⁵**

VS-4 P/A Emergency Vehicle Siren Contains P/A, Broadband, Wail, Yelp, Pulse & Airhorn. P/A Override features, plus volume control of all siren modes. Restricts output when operating in people places. Includes horn speaker, microphone, 3" x 3 1/2" x 2" electronic center, 10' ft. cable, mounting bracket and hardware. 12V DC @ 1.5A **\$139⁹⁵**

Siren-Light Combo A one-unit siren/yelp alarm, revolving halogen or strobe light and window mount. Fits all cars, slides on top of car window and plugs into cigarette lighter outlet. The power plug contains an "on" LED and three position switch to select Yelp, Off or Wail modes. 12 VDC @ 5A.

VS-2L Halogen Specify amber, blue or red..... **\$249⁹⁵**
VS-2LS Strobe Specify amber, blue or red..... **\$299⁹⁵**



DIAMOND ANTENNA SWR/Power Meters

Five models, measure power & SWR with 5-10% of E.S. accuracy. Illum. meter, sensor switch, LED indicator. Power ratings for intermittent oper. For contin., ratings vary with freq. SO-239 connectors on all except SX-1000 (type-N). SX-600 & SX-1000 are dual-band. 6" w x 2 1/2" h x 4" d, 2 lbs

- SX-100** 1.6-60MHz, 30/300/3kW ranges **\$134⁹⁵**
- SX-200** 1.8-200MHz, 5/20/200 ranges **\$94⁹⁵**
- SX-400** 140-525MHz, 5/20/200W ranges **114⁹⁵**
- SX-600** 1.8-160MHz and 140-525MHz, 5/20/200W ranges **169⁹⁵**
- SX-1000** 1.8-160MHz and 430-1300MHz, 5/20/200W ranges **214⁹⁵**

New! Cross-Needle SWR/Power Meters
Indicate forward and reflected power and SWR simultaneously. 50Ω impedance, SO-239 connectors, 10% E.S. accuracy, 3.3" w x 3.4" h x 3.7" d, 9 oz

- SX-20C** 3.5-30/50-140/130-150MHz ranges; 30/300W (SW min)..... **\$89⁹⁵**
- SX-40C** 144-470 MHz (220 MHz with correction factor); 15/150W (3W minimum power) **\$79⁹⁵**

VECTRONICS SWR & Power Meters

PM-30HF Similar to pic. RMS or PEP forward and reflected power and SWR simultaneously. Lighted cross-needle meter. Covers 1.8-60MHz, 300/3000W ranges. 5 3/8" w x 3 3/8" h x 5 3/8" d, 1.2 lbs..... **\$79⁹⁵**

PM-30UV (shown) Same features as the 30HF, but covers 144, 220 and 450MHz bands **\$89⁹⁵**



BIRD
Electronic Corporation

43 THRULINE® Wattmeter

Measures incident & reflected power in coaxial transmission lines with $\pm 5\%$ of full scale accuracy; insertion VSWR is less than 1.05.

Comprised of a line section, and a direct-reading meter with expanded scales in 25, 50 and 100 units. Rugged, durable aluminum case.

Supplied with SO-239 Quick Change (QC) type connectors with optional N and BNC types available.

Optional plug-in elements provide a wide choice of frequency ranges from 2-1000MHz, with power levels up to 5KW from 2-30MHz and up to 1KW from 30-1000MHz. Select one or more elements now, add others as needed. 6 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " d., 3 lbs. **\$263⁹⁵**

4431 THRULINE® Wattmeter

Same as the 43, has a built-in variable RF signal sampler to provide an adjustable low level signal sample for counters, scopes, analyzers, etc....**\$464⁹⁵**

43P Peak Reading Wattmeter

Same versatile functions as the BIRD 43, but includes switch selectable Peak Reading (PEP) capability. Uses the same plug-in elements, QC connectors & accessories. Requires two 9V batteries. **\$396⁹⁵**



See Price List for BIRD accessory pricing

TABLE 1 Standard BIRD Elements

Power Range	2-30	25-60	50-125	100-250	200-500	400-1000
5 watts	—	5A	5B	5C	5D	5E
10 watts	—	10A	10B	10C	10D	10E
25 watts	—	25A	25B	25C	25D	25E
50 watts	50H	50A	50B	50C	50D	50E
100 watts	100H	100A	100B	100C	100D	100E
250 watts	250H	250A	250B	250C	250D	250E
500 watts	500H	500A	500B	500C	500D	500E
1000 watts	1000H	1000A	1000B	1000C	1000D	1000E
2500 watts	2500H					
5000 watts	5000H					

TABLE 2 Low-Power BIRD Elements

1 watt	Cat. No.	2.5 watts	Cat. No.
25-30 MHz	025-1	25-30 MHz	025-2
30-35 MHz	030-1	30-40 MHz	030-2
35-40 MHz	035-1	40-50 MHz	040-2
40-50 MHz	040-1	50-60 MHz	050-2
50-60 MHz	050-1	60-80 MHz	060-2
60-80 MHz	060-1	80-95 MHz	080-2
80-95 MHz	080-1	95-150 MHz	095-2
95-125 MHz	095-1	150-250 MHz	150-2
110-160 MHz	110-1	200-300 MHz	200-2
150-250 MHz	150-1	250-450 MHz	250-2
200-300 MHz	200-1	400-850 MHz	400-2
275-450 MHz	275-1	800-1000 MHz	801-2
425-850 MHz	425-1		
800-1000 MHz	801-1		

Variable RF Signal Samplers

Stand alone wide-range, THRU-LINE® RF coupling probes for spectrum analysis, RF signal observation on a scope, or frequency counting and control.



STARTEK
FREQUENCY COUNTERS

STARTEK ATH Series Frequency Counters are Subcompact, Pocket-size units, designed for ease of use and dependable operation. The Low Cost of these instruments belies the Quality Construction and innovative features found throughout.

STARTEK counters are used to find transmitting frequencies, locate RF sources, check all sorts of transmitting equipment for operation and frequency calibration. They are used with antenna analyzers for antenna tuning and to check or monitor the output frequency of transmitters, signal generators, etc.



ATH series counters have High-Speed Response and a special AUTO TRIGGER & HOLD feature. They can display and hold the frequency of a signal in less than 1/10 second. All have two MMIC amplifiers and ultra high sensitivity - less than 1 mV over most of the range. All have anodized aluminum cabinets with machine thread screws, auto polarity power input (9-12VDC), 6 sample times, a manual HOLD switch, Ni-Cad batteries & 110V AC adapter. Made in the USA.

ATH-15 1-1500 MHz. 2 inch, 10 segment signal strength Bar Graph, low battery indicator. **\$189⁹⁵**

ATH-30 1-2800MHz. Signal strength Bar Graph, low battery indicator, reset control & ONE-SHOT only (single read & hold, does not allow subsequent signal to displace reading, switch selectable)..... **\$249⁹⁵**

ATH-50 S-2800 MHz (2.8GHz). Has HIGH IMPEDANCE input (1 megohm) from 5 Hz to 50 MHz that can be used with probe without excessive circuit loading. Also Bar Graph, low battery indicator, ONE-SHOT and reset control. This compact model does more than most bench counters..... **\$299⁹⁵**

OPTION HST-15 High accuracy option. ± 0.2 PPM TXCO timebase, 18-40°C. Order the ATH-30/50 counters with this option additional **\$100⁰⁰**

BAND PASS FILTERS Four filters available to extend readability distance: **LP-60** DC-60MHz; **BP-150** 130-500MHz; **HP-400** 400-1500MHz; **HP-800** 800-2000MHz..... each **\$49⁹⁵**

ACCESSORIES - See Price List for complete listing.

STARTEK Help Line: (954) 537-5577

COMET



SWR/Power Meters

Three models, with separate meter and RF sensor with 6 ft. long cable. Lighted, cross-needle meter with three selectable power ranges, shows forward and reflected power, and SWR simultaneously, plus indicates DC voltage from power source. 50 Ω , 12VDC. 4 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " d., 1 lb., 4 oz.

CMX-1 1.8-60MHz; 30, 300, 2kW ranges..... **\$179⁹⁵**

CMX-2 1.8-200MHz; 20, 50, 200W ranges..... **\$159⁹⁵**

CMX-3 140-525MHz; 20, 50, 200W ranges..... **\$149⁹⁵**



NGC-3000
Bench SWR & Power Meter

Covers the range from 118 to 530MHz. Large illuminated meter, 5W-20W & 200W power ranges, both average and PEP. 12V DC 7 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " d., 2 lbs..... **\$99⁹⁵**

More Comet & NGC meters - see Price List

MFJ ENTERPRISES, INC.
SWR/Power Meters

MFJ-864 (bottom) Covers 1.8 to 60MHz, 144MHz & 440 MHz bands. Dual sensors, connect your HF & VHF/UHF rigs at the same time. Monitor SWR & Power of either. Lighted Cross-Needle meter indicates 30/300W forward and 6/60W reflected power simultaneously. Uses 12V DC for meter light. 7 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " d..... **\$84⁹⁵**

MFJ-862 (middle) Similar to the 864, but for 144MHz, 220MHz & 440MHz. Ranges: 30/300 watts forward and 6/60 watts reflected. 5 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " d..... **\$54⁹⁵**

MFJ-860 (top) Similar to the 864, but covers HF - 1.8 to 60MHz. Ranges: 30/300 watts forward and 6/60 watts reflected. 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " d..... **\$44⁹⁵**

MFJ-815B Features a large 3 inch lighted Cross-Needle meter. Gives accurate SWR & peak or average power readings from 1.8-60 MHz. Power Ranges: 200/2000 watts forward and 50/500 watts reflected. Push buttons 12V DC for meter light. 7 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " d..... **\$69⁹⁵**

MFJ-817 Looks and features similar to 815B but covers 144 & 440MHz bands. Power Ranges: 200/20 forward and 50/5W reflected. 7 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " d..... **\$79⁹⁵**

MFJ-812B Indicates forward & reflected power on 2M & 220MHz & SWR 14-220MHz, plus field-strength 1-220MHz. Ranges: 30/300W ranges & 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " d..... **\$34⁹⁵**

MFJ-816 Indicates forward and reflected power from 1.8 to 30MHz. Ranges: 30/300W. 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " d..... **\$34⁹⁵**



MIRAGE SWR/Power Meters

Four models, all measure RMS & peak forward & reverse power & SWR, directly without charts or calculations. Negligible insertion loss. Removable coupler, SO-239 connectors. Requires 9V battery, or AC adapter. Low battery indicator. 5 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " d., 3 $\frac{1}{2}$ lbs.

MP-1 1.8 to 30 MHz; 25, 200, 1KW ranges... **\$219⁹⁵**

MP-2 50 to 200MHz; 50, 500, 1.5KW ranges... **\$219⁹⁵**

MP-3 425 to 450MHz; 5, 50, 150W ranges..... **\$249⁹⁵**

MP-4 1260 to 1300MHz; 1, 10, 100W ranges. **\$259⁹⁵**



YAESU

SWR/Power Meters

YS-60 Monitors average (CW) and peak (SSB) transmitter power and VSWR. Covers 1.6 to 60MHz, up to 2KW. Meter

ranges: 0/200 and 2000W. 50 Ω impedance, SO-239 connectors. Requires 12V DC for meter lamps and internal circuits. 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ " d., 1 $\frac{1}{2}$ lbs..... **\$129⁹⁵**

YS-500 Similar to YS-60, but covers 140-525MHz, 4/20/200W ranges. 12V is not required..... **\$109⁹⁵**



MFJ-204B Antenna Bridge Quickly optimize 1.8 through 30MHz antennas for peak performance. Portable - take it to your antenna site. Determine if your antenna is too long or too short, measure resonant frequency and resistance to 500 Ω . Built-in resistance bridge, null meter, tunable oscillator-driver. Uses 9 volt battery. 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " d..... **\$79⁹⁵**



MFJ MFJ ENTERPRISES, INC.

MFJ-850 Line Voltage Monitor Plug into any 110V AC outlet and monitor line voltage on an expanded 95 to 135 Volt scale. 2 1/2" x 2 1/4" x 1 1/2" **\$19⁹⁵**

DUMMY LOADS

OIL FILLED

MFJ-250 Versaload A 50Ω oil-filled dummy load that provides low VSWR to 400 MHz. Rated at 1 KW CW or 2KW PEP for 10-minutes, with 50% power rating for 20-minutes and 200W CW (400W PEP) continuous. 7 1/4" h x 6 1/2" diameter.....With oil **\$49⁹⁵**

MFJ-250X same, but no oil..... **\$29⁹⁵**

DRY LOADS

An air cooled, non-inductive 50Ω resistor mounted in a perforated metal housing. Full rated load for 30-seconds with a de-rating curve up to 5-minutes.

MFJ-260C (HF & VHF) Rated at 300W, 1:1 SWR up to 30MHz, then 1.5:1 up to 650 MHz. 2 1/2" w x 2 1/2" h x 7" d. **\$29⁹⁵**

MFJ-260CN With type "N" connectors..... **\$34⁹⁵**

MFJ-264 (UHF) Performs from 1.3 to 650MHz, usable to 750MHz. Rated at 1.5KW for 10-seconds and 100W for 10-minutes. 3" w x 3" h x 9" d..... **\$59⁹⁵**

VECTRONICS DUMMY LOADS

DL-300M Dry Dummy Load Simulates an accurate 50Ω antenna up to 150 MHz. Test your transmitter without radiating a signal. Power handling curve rated at 300W for 15-seconds, to 100W for 40 seconds. VSWR <1.3:1 at 150MHz. 5" h x 2" d x 2 1/4" h, 8 oz **\$34⁹⁵**

DL-650M Dry Dummy Load Good all the way up to 650MHz. Power handling curve is rated at 1500W for 10-seconds, down to 100W for 10-minutes. VSWR <1.3:1 at 500MHz..... **\$64⁹⁵**

DL-2500 Dry load (Hi-Power) A fan cooled heavy-duty load for up to 150MHz. Power handling curve rated at 2500W for 1 minute, down to 500W for 10 minutes..... **\$179⁹⁵**

DAIWA industry co. inc.

CN-101 Cross-Needle Power & SWR Meter Covers 1.8 to 150MHz, rated at 1500W from 1.8 to 60MHz and up to 1000W at 144MHz. Shows Forward and Reverse power and VSWR simultaneously. Three Power Ranges: 5/150/1500W (RMS or PEP); ±10% of full scale accuracy. SWR detection sensitivity: 4W minimum. 50Ω impedance, SO-239 connectors. 6" w x 3" h x 3 1/4" d, 1 1/2 lbs **\$94⁹⁵**

CN-103M Cross-Needle Power/SWR Meter Same as CN-101, but covers 140 to 525 MHz and rated at 200W. Two Power Ranges: 20/200W (RMS or PEP)..... **\$99⁹⁵**

CN-410M Compact Cross-Needle Power & SWR Meter For mobile or base use - covers 3.5 to 150MHz. Two power ranges: 15/150W forward & 50/5W reflected. Backlighted meter shows forward/reverse Power and VSWR simultaneously. SWR detection sensitivity: 3W minimum. 50Ω impedance, SO-239 connectors. Mounting bracket included. 2 1/2" x 3" d x 3 1/4" d, 10 oz..... **\$119⁹⁵**

CN-460M Compact Cross-Needle Power & SWR Meter Same as 410, but covers 140-450 MHz..... **\$99⁹⁵**

Affordable... RF Applications, Inc. High Performance & High Quality RF Power Measurement Systems



P-3000 HF Power & VSWR Indicator

Microprocessor based for fast, accurate Power & VSWR readings from 1.8 to 30MHz and 15 to 2950 watts - without adjustments or calibration. Three separate instruments in One: Peak Digital Power Display, VSWR Display with Alarms and 10-LED Instantaneous Power Bargraph. During high VSWR conditions a relay can interrupt the control line to linear to reduce the chance of damage. Separate remote directional coupler locates up to 6 ft. away. 50Ω input and output, SO-239 connectors. Requires 12V DC @ 250mA. Display: 6 1/2" w x 5 1/4" w x 2 1/4" d; Coupler: 4 1/2" w x 3 3/8" x 2 1/4" d, 6 lbs total..... **\$299⁹⁵**



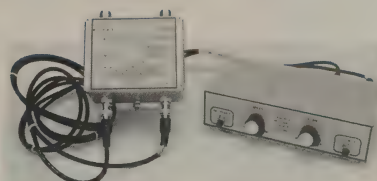
P-2000A RF Power & VSWR Indicator

For HF applications from 1.8 to 30MHz and up to 2000W RF output. It has an adjustable meter response time and uses the same remote coupler as the P-3000 unit. An adjustable VSWR setting and a relay are provided that can be used to automatically disable an amplifier under high VSWR conditions. Display: 8" w x 4 1/4" h x 2 1/4" d; Coupler: 4 1/2" w x 3 3/8" x 2 1/4" d **\$299⁹⁵**



Match Alert™ VSWR Monitor & Alarm

Provides protection for HF transmitting systems! A microprocessor monitors antenna VSWR and provides a fast visual and electrical alarm if any of eight different dip-switch selectable VSWR presets are exceeded. Covers 1.8 to 30MHz and is rated at 3000W. A relay contact is available via a 3 ft. long cable for millisecond control of an external function such as shutting down an amplifier, etc. Cast aluminum enclosure, PL-259 connectors. Requires 11 to 16V DC **\$129⁹⁵**



P-2000CW RF Power/VSWR Indicator

Uses an audible Morse Code interface to report the values of forward and reflected power. These values are stored during and at the end of each transmission and can be reported via CW while on the air or after the transmission. If the VSWR exceeds a preset value, the operator is alerted with the Morse "V" character, and a relay can provide control to disable a power amplifier, etc. Covers 1.8-30 MHz & indicates from 5 to 2000W Power & VSWR level. 12V DC. Display: 8" w x 4" h x 2" d. Remote Coupler: 4 1/2" w x 3 3/8" h x 2 1/4" d, 4 lbs **\$249⁹⁵**

P-1500 Digital RF Power & V.S.W.R. Indicator

Covers 1.8 to 30MHz, rated at 1.5kW continuous. Built-in coupler. 4-digit LED display, autoranging bargraph. VSWR status lights. 12VDC/100mA 4" w x 3 1/2" h x 4" d, 4 lbs.. **\$199⁹⁵**



DC Adapters

P-3000-P 12V adapter for P-3000, P-2000A

and P-2000CW **\$12⁹⁵**

P-1500-P 12V adapter for P-1500 **\$16⁹⁵**

Information Direct:
www.rfapps.com

PALOMAR Engineers

M-840 SWR & Power Meter

Two 30-segment LED displays show PEP or average power & SWR instantaneously & simultaneously, without calibration - just select the proper power range. Covers 1 to 30MHz with 2, 20, 200 & 2000W power ranges. Shows VSWR 1.0 to 10:1+. Remote sensor with 6 ft. cable. Requires 10-15 VDC @ 800ma. 4 1/2" w x 4 1/4" h x 2 1/4" d, 1 lb. **\$189⁹⁵**

PCM-1 RF Current Meter

Measures RF current from 1 to 30MHz. Clamp-on design allows you to check: Radial systems to find broken radials; Antenna and feedline currents; Currents on coax shields and on any wire up to 1/2" diameter. Three Ranges: 100ma, 1 Amp & 5 Amps - full scale. Handheld, portable, 9V batt. operated - use right at your antenna. 6" w x 2 1/2" h x 2" d, 9 oz..... **\$129⁹⁵**



SWR-1



VANCO Low Cost Meters

SWR-3



SWR-1 Field strength/SWR meter
Range: 3.5-150MHz;
Impedance: 52Ω; SWR:
1:1-3:1; Accuracy: 5%;
Meter Sensitivity: 300uA;
RF Pick-up: 5" whip; 6" h x 2" w x 2 1/4" d, 14 oz..... **\$19⁹⁵**

SWR-3 SWR meter

Frequency Range: 1.7 to 30MHz; Impedance: 50-52Ω; SWR: 1:1-3:1; Accuracy: ±5%; Meter Sensitivity: 300uA; Size: 2 1/2" x 3 3/8" x 3", 6 oz..... **\$14⁹⁵**



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1.8-170 MHz

SWR Analyzer™



MFJ-259B
\$229⁹⁵

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MFJ-249B, \$199.95. Like MFJ-259B, but reads SWR, true impedance magnitude and frequency only on LCD. No meters.

MFJ-209, \$119.95. Like MFJ-249B w/out LCD or freq. counter, but reads SWR only on meter.

MFJ-219B, \$89.95. UHF SWR Analyzer™ covers 420-450MHz. Jack for external freq. counter. 7/8" x 2 1/2" x 2 1/2". Use two 9 volt batteries or 110 VAC with MFJ-1312B, \$12.95. Free "N" to SO-239 adapter.

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MFJ-224, \$149.95. Measure signal strength over 60dB range, check and set FM deviation, measure antenna gain, beamwidth, front-to-back ratio, sidelobes, feedline loss in dB. Plot field strength patterns, position antennas, measure preamp gain, detect feedline faults, track down hidden transmitters, tune transmitters and filters. Plug in scope to analyze modulation wave forms, measure audio distortion, noise and instantaneous peak deviation. Covers 143.5-148.5MHz. Headphone jack, battery check function. Uses 9V battery. 4"x2 1/2"x6 1/2".



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MFJ

The New MFJ-259B

Can't Afford Not to Have One!

The world's most popular SWR analyzer just got incredibly better and is giving you more value than ever!

The MFJ-259B is a complete Ham radio test station including – Frequency Counter, RF signal generator, SWR Analyzer™, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance and Inductance Meter and more!

Take the frustration out of getting your antennas properly tuned up for maximum performance. Gone are the days of using a conventional, sometimes questionable, SWR meter. You will no longer have to drag your rig (RF source) out into the yard. No more risking a heart attack running in and out of the house or up and down the tower to make those seemingly endless readings and adjustments.

The MFJ-259B is an all-in-one unit, with a built-in RF source so you can take it to the antenna, take one reading to get a complete picture of your antenna performance, and make all tuning adjustments on the spot.

Super EZ to use! Connect the feed line, set the bandswitch and tune the dial -- just like a transceiver. All information is clearly displayed instantly on the large, easy-to-read, 2-line LCD screen and side-by-side meters.

Read antenna SWR & Complex Impedance from 1.8-170MHz. Complex Impedance can also be read as series resistance and reactance (R+jX) or as magnitude (Z) and phase (degrees).

When tuning transmission lines or making up phasing harnesses for stacking antennas, you can quickly determine exact 1/4 or 1/2 wavelengths. You can also determine the velocity factor, coax cable loss in dB, length of coax and distance (in feet) to a short or open in coaxial cable.

Read SWR, return loss and reflection coefficient at any frequency simultaneously at a single glance, also inductance in uH and capacitance in pF at RF frequencies.

The MFJ-259B has a built-in frequency counter, Ni-Cad charger circuit, battery saver, low battery warning, and smooth reduction drive tuning.

Overall, Here's what you can do

- Find true resonant frequency of antenna.
- Trim dipoles and verticals.
- Adjust your Yagi, quad, loop and others, change antenna spacing and height. Watch SWR, resistance & reactance change instantly. You'll know exactly what to do, simply watch the display.
- Perfectly tune critical HF mobile antennas in seconds for super DX -- without subjecting your transceiver to high SWR.
- Measure your antenna's 2:1 SWR bandwidth on one band, or analyze multiband performance

- over the entire spectrum 1.8-170 MHz!
- Check SWR outside the ham bands without violating FCC rules.
- Take the guesswork out of building and adjusting matching networks and baluns.
- Accurately measure distance to a short or open in a failed coax. Measure length of a roll of coax, coax loss, velocity factor and impedance.
- Measure inductance and capacitance.
- Troubleshoot and measure resonant frequency and approximate Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns.
- Adjust your antenna tuner for a perfect 1:1 match without creating QRM.

Call or write for Free Manual

MFJ's comprehensive instruction manual is packed with useful applications -- all explained in language you can understand.

Take it anywhere

Fully portable, take it up towers, to remote sites, or on DX-peditions. It uses 10 AA or Ni-Cad batteries (not included) or 110 VAC with MFJ-1315, \$14.95. Its rugged, all metal cabinet is a compact 4" x 2" x 6 1/2".

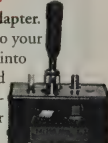
How good is the MFJ-259B?

MFJ SWR Analyzers™ work so good many manufacturers use them in their labs and on production lines -- saving thousands of dollars in instrumentation costs! Used by professionals worldwide.

SWR Analyzer Accessories

MFJ-66, \$19.95. Dip Meter Adapter.

Plug a dip meter coupling coil into your MFJ SWR Analyzer™ and turn it into a sensitive, accurate band-switched dip meter. Set of two covers 1.8-170MHz depending on your SWR Analyzer™.



MFJ-29C, \$24.95. Genuine MFJ Carrying Case. Tote your MFJ-259B anywhere with this custom



carrying case. Has back pocket with security cover for carrying dip coils, adapters and accessories. Made of special foam-filled fabric to cushion blows, deflect scrapes, and protect knobs, meters and displays from harm.

Wear it around your waist, over your shoulder, or clip it onto the tower while you work -- the fully-adjustable webbed-fabric carrying strap has snap hooks on both ends. Has clear protective window for frequency display and cutouts for knobs and connectors so you can use your MFJ SWR Analyzer™ without taking it out of your case. Look

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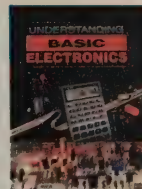
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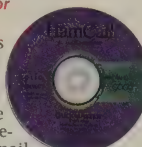


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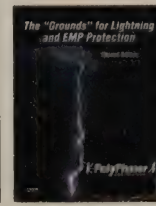
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CQ Getting Started in Ham Radio

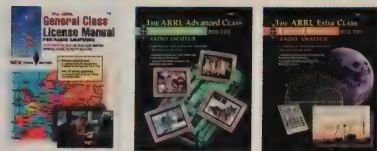
This is a fast-paced video introduction to the fascinating world of ham radio. CQ's experts show how to select equipment and antennas; which bands to use; how to use repeater stations for improved VHF coverage; the importance of grounding and the basics of soldering. Get the most out of your station, whether it's home-based, mobile or handheld **CQX HAMVIDEO \$19.95**



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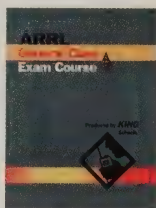
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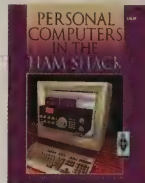


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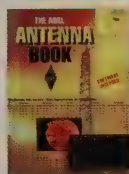
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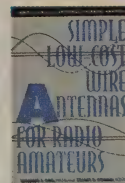


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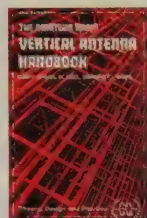


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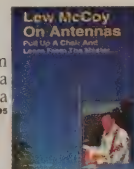


Antenna Impedance Matching

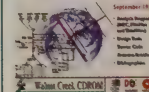
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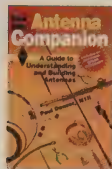
Antennas



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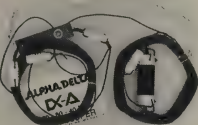
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DX-A 160-80-40 Meter 1/4-wave Twin Sloper A top low frequency DX antenna. Combines the tremendous DX firepower of the 1/4-wave sloper with the wide bandwidth of the 1/2-wave dipole. One leg is 67 ft., the other 55 ft. Installs like an Inverted-V with ground return accomplished thru tower or down-lead... **\$59⁹⁹**

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Dipoles use the DELTA-C Hardware Kit

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Transi-Trap® Surge Protectors



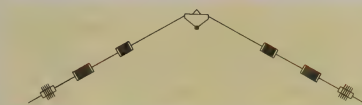
Transi-Trap Surge Protectors are gas surge arresters which can protect your valuable Ham equipment much more effectively than the lower cost air-gap types. Full UL listing for safety and protection.

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| HV 2KW thru 500 MHz 39⁹⁹ | RT-N/2G 200W, N conn. 46⁹⁹ |
| HV/N 2KW thru 1GHz (N) 46⁹⁹ | HV/2G 2KW, UHF conn. 44⁹⁹ |
| LT T-type 200W thru 30MHz 29⁹⁹ | HV-N/2G 2KW, N conn. 49⁹⁹ |



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160M - 20kHz • 80M - 40 kHz • 40M - 300 kHz
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DELTA-4 4-position coaxial switch with SO-239 connectors, rated for up to 500MHz. **\$79⁹⁹**

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Antenna Hardware Kit



Don't assemble your next dipole antenna without one of these CENTER and END insulator combos. They're designed for strength, and to provide equipment protection with a built-in replaceable SEP Arc-Plug® Static Electricity Protector. Ideal for dipoles, Vees, zepps and all kinds of SWL receive antennas. Feeds with either coax or balanced line. Rated for full legal power.

The SEP Arc-Plug protector which is mounted in the DELTA-C center insulator "bleeds off" slow rising static electricity charges routing them harmlessly to ground, before they can enter the shack thru the feedline. This is far more effective than DC grounded baluns or chokes, which can be "popped" by static charges. Dangerous static charges are developed from thunderstorms, high wind driven snow or desert sand, and have been measured to 1,000's of volts; so potent, they can puncture the dielectric of unterminated coax.

The DELTA-C Center Insulator and DELTA-CIN end-insulators are fabricated with an extremely rugged UV and RF resistant DELTALLOY material that is so tough, you can drop it off a roof without damage. Don't rely on fragile ceramic or glass insulators! Only stainless steel hardware used in the center insulator for salt air and other corrosive environments, and all internal connections are hand soldered.

DELTA-C Antenna hardware kit Contains DELTA-C Center insulator, (2) end-insulators and a SEP ARC-PLUG Protector **\$29⁹⁹**

DELTA-CIN End-insulators (separate) ea. **\$1⁹⁹**

OUTbacker

HF Mobile Antennas

Performance plus Convenience...

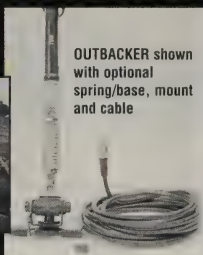


Whether mobile...

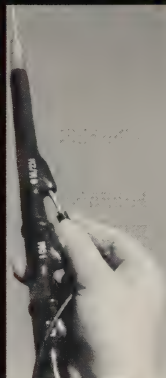


including HF + 6&2M

or backpack portable!



OUTBACKER shown with optional spring/base, mount and cable



- HAM - MARS - CAP - MARINE/ITU • LOW SWR
 - WIDE BANDWIDTH • NO CHANGING COILS
- ## It's plug-n-play!

The Outbacker™ - Constructed of fiberglass with pretuned copper helical windings and covered with smooth epoxy-resin and a coating of polyurethane for strength, and durability. The mounting ferrule is nickel-plated brass with standard 3/8x24 threads.

Frequency coverage is broadbanded but the top spike is adjustable which allows tuning for the lowest possible VSWR on 75M and the upper end of 10M.

Tap points are clearly engraved for each band. Changing bands is accomplished manually by plugging the unique OUTBACKER "Wander lead" into the proper tap; for 75M the lead is removed entirely. Beautiful, shiny black finish. 8 models, with optional spring/base, mounts and cable.

- OUTBACKER PERTH
- OUTBACKER PERTH PLUS
- OUTBACKER 8
- OUTBACKER HP
- OUTBACKER SPLIT
- OUTBACKER TRI-SPLIT
- OUTBACKER MARINER
- OUTBACKER STEALTH PLUS
- OUTBACKER Spring/Base
- OUTBACKER OB-360
- DIAMOND K-4003/8C
- DIAMOND C-110

Description

75-10M + WARC, 150W P.E.P. • 7.5 ft. tall • 3.5 ft. stinger retracts into the 4 ft. mast for garaging.....	AES Model #	Price
75-10M + 6 & 2M • 6 ft. tall • Perfect for HF + VHF radios: IC-706, DJ-70T, etc.	Perth	\$289⁹⁵
75-10M, 300W P.E.P. • 6 ft. tall	Perth Plus	\$299⁹⁵
75-10M • HIGH POWER (rated at 500W P.E.P.) • 6 ft. tall	OB-8	\$279⁹⁵
75-10M, 300 W P.E.P. • 6 ft. tall • Breaks down into (2) 3 ft. sections, comes with carrying pouch	OB-8HP	\$299⁹⁵
Same as OUTBACKER SPLIT except breaks down into 3-2 ft. sections, storage pouch included	OB-S8	\$299⁹⁵
Covers ITU Marine: 2.182, 4.1, 6.2, 8.2, 12.4, 16.5, & 22.1MHz and Ham bands: 75, 40, 20, 17 & 10M	OB-8TRI	\$329⁹⁵
75-10M + 6 & 2M • 4 ft. tall, 150W PEP • Perfect for use with HF + VHF radios: IC-706, DX-70T, etc.	OB-M	\$429⁹⁵
HEAVY DUTY • Nickel/zinc plated • 3/8-24 threads • SO-239 connector • Requires 1/2" mtg. hole	Stealth PLUS	\$269⁹⁵
Trunk lip mount with spring for Perth/STPlus/Perth Plus	OB-SB	\$99⁹⁵
Diamond 3/8" x 24 thread trunk-lip mount with 6 ft. coaxial cable for all OUTBACKER models	OB-360	\$99⁹⁵
Diamond 10 ft. extension cable for K-400/3/8C trunk-lip mount	DIA K400-3/8C	\$69⁹⁵
	DIA C-110	\$14⁹⁵

The Outreach™ Antenna - \$399⁹⁵

A complete *efficient* portable antenna system to meet the needs of those who have limited space or are deed restricted. Ideal for backyard, patio, woods or field day. Covers all bands from 160 thru 10 meters, providing an exceptional level of performance. The perfect companion for the Outpost Tripod mount. Slim design makes it nearly invisible to your neighbors.

- All Bands - 160 thru 10 meters • Length: 12 ft. • Weight: 4 lbs.
- Exceptional performance - 10, 12, and 15 meters are 5/8 wave and all bands are center loaded for peak performance. • Power: 300 watts P.E.P.
- Utilizes the time proven OUTBACKER® band tap system.
- Split 8 ft. shaft and 4 ft. stinger • Breaks down to 4 ft. for portability
- Terminates in standard 3/8" x 24 threaded base.

The Outreach 500™ Antenna - \$439⁹⁵

The mechanical specifications are exactly the same as for the standard Outreach model, however it does not cover 160 meters, but includes 6 meters in addition to all other HF bands including WARC bands. A band tap is provided for 80 & 75 meters, allowing coverage of the entire 3.5-4.0 MHz range. Power handling has been increased to 500W CW & 600W P.E.P.

The Outrunner™ Antenna - \$349⁹⁵

Same as for the standard Outreach model, but in a 9 ft. version instead of 12 ft. Covers. 160 thru 10 meters including WARC, and has a split shaft and a 3 ft. stinger. Rated at 150 watts PEP, and has a standard 3/8" x 24 base.





Variable Response Console

An advanced audio processing speaker system that offers studio level audio quality for music, voice, and CW/data for the communications enthusiast. It enhances the reception capabilities of ANY receiver, transceiver or scanner—even the expensive ones using DSP! An exclusive custom designed ducted port bass reflex speaker system offers outstanding audio performance.

- Low distortion, low harmonic push-pull audio amplifier. Outperforms the typical single-ended amplifier.
- Adjustable 12dB Bass boost and cut circuitry enhances both Voice and Music. LED reads out in dB
- Adjustable sharp cut-off "Sampled Data Switched Capacitor Audio Filter" (SCAF) can be set for optimum interference reduction for any mode and any band condition – AM, FM, SSB, CW or data. LED light bar readout shows cut-off frequency.
- Peaking circuitry (20 dB) allows CW and Data signals to "pop" out of the background noise & interference.
- Continuously adjustable 40dB Deep Notch circuitry effectively takes out interfering heterodynes.

Model VRC Variable Response Console\$249⁹⁵

Model VRC-2 Ducted Port Bass Reflex Speaker same as above, but no amplifier/filter ... \$99⁹⁵



KENT Paddles

from Alpha Delta

Reasons for Buying KENT Paddles:

- Delicate, smooth feel due to sealed ball bearings instead of simple spring-loaded pivots • Free movement, minimum friction sideplay
- Precise gap alignments with instrument knurled heads on fine pitched screws and locking nuts.
- Rugged components made from machined, polished solid brass contained within a permanent brass housing.
- Silver contacts • Non-slip feet • Weighted for stability • Paddle models use heavy steel bases
- Designed and produced by R.A. Kent Engineers – England. Fully assembled and tested by Alpha Delta.

Model SK-1 Straight Morse Key (top)\$129⁹⁵

Model SP-1 Single Paddle Morse Key (bottom/left) ...\$139⁹⁵

Model TP-1 Twin Paddle Morse Key (bottom/right)....\$149⁹⁵



Jim Burns, WB4ILP demonstrates the versatility of the Outpost™



Alpha Delta Outpost™ – 199⁹⁵

Tripod/Ground Coupler Mounting System

- Designed to match the base impedance of all OUTBACKER® antennas.
- Fold-over top mount, 3/8" x 24" – SO-239. The antenna will be out of view when not in use.
- Constructed of aircraft 6061-T6 aluminum, stainless steel hardware & wing nuts – no tools required.
- No digging – no holes in ground – no concrete.
- Improves antenna efficiency. The fold-out legs act as a large capacitor to provide proper ground coupling resulting in a better impedance match.
- Fold-up design • Weight: 18 lbs

Alpha Delta DH-1 Hydraulically Dampened Fold-Over Fixture for Vertical Antennas – \$249⁹⁵

- Allows easy installation or working on your vertical antenna from the ground.
- Quick and easy raising and lowering. Great for larger HF Verticals such as the R-7000, DX-77, or others up to 29 ft. long.
- Hydraulic module provides assisted lowering for safe, one man operation.
- Stealthy! When lowered, the attached antenna rests steady in a horizontal position hidden from your neighbor's view.
- Bolts to weighted board as shown, or 16" square by 24" deep concrete base recommended for strong permanent installation – just use sack concrete.
- Stainless steel hardware, no assembly required. Shipping weight 33 lbs.



**Featuring the COMET
Exclusive SLC System:**

- Linear Coll for Maximum Gain
- Soldered Element Joints
- ABS Radome Joints: Weather Proof/Invisible to RF for the Finest Radiation Pattern

CYA-240 • Dual-band 146/446MHz Yagi Cable and Divider included • Gain VHF 9.5dBi 3 Elements • UHF 11.6dBi 5 Elements • Max Pwr: 150 FM/300W SSB • Boom Length: 5'3" • Weight: 4lbs. 7ozs. • Conn: SO-239 • Construction: Aluminum

NEW

GP-3 • Dual-band 146/446MHz Base Repeater Antenna
Gain & Wave: 146MHz 4.5dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 •
Max Pwr: 200W • Length: 5'11" • Weight: 2lbs. 9ozs. •
Conn: Gold-plated SO-239 • Construction: Single-piece fiberglass

GP-6 • Dual-band 146/446MHz Base Repeater Antenna
Gain & Wave: 146MHz 6.5dBi 5/8 wave x 2 • 446MHz 9.0dBi 5/8 wave x 5 •
Max Pwr: 200W • Length: 10'2" • Weight: 3lbs. 8ozs. • Conn: Gold-plated SO-239 •
Construction: Fiberglass, 2 Sections

GP-9/GP-9N • Dual-band 146/446MHz Base Repeater Antenna • BEST SELLER!
Gain & Wave: 146MHz 8.5dBi 5/8 wave x 3 • 446MHz 11.9dBi 5/8 wave x 8 •
Max Pwr: 200W • Length: 17'8" • Weight: 5lbs. 11ozs. • Conn: GP-9 Gold-plated
SO-239 • GP-9N Gold-plated N-type female • Construction: Fiberglass, 3 Sections

CX-333 • Tri-band 146/220/446MHz Base Repeater Antenna
Gain & Wave: 146MHz 6.5dBi 5/8 wave x 2 • 220MHz 7.8dBi 5/8 wave x 3 •
446MHz 9.0dBi 5/8 wave x 5 • Max Pwr: 120W • Length: 10'2" • Weight: 3lbs. 1oz. •
Conn: Gold-plated SO-239 • Construction: Fiberglass, 2 Sections

GP-15 • Tri-band 52/146/446MHz Base Repeater Antenna
Gain & Wave: 52MHz 3.0dBi 5/8 wave • 146MHz 6.2dBi 5/8 wave x 2 • 446MHz 8.6dBi
5/8 wave x 4 • Max Pwr: 300W • Length: 7'11" • Weight: 3lbs. 1oz. • Conn: Gold-plated
SO-239 • 2MHz band-width after tuning (6M) • Construction: Single-piece fiberglass

COMET has an extensive line of Mono-Band/Dual-Band/Tri-Band Antennas for Base Station and Repeater use.

For a complete catalog of COMET Antenna products call or visit your local dealer. Or, contact NCG Company at 800/962-2611. Use COMET products, and enjoy amateur radio to it's fullest!

COMET

1275 N. Grove Street • Anaheim • California 92806
(714) 630-4541 • (800) 962-2611 • Fax: (714) 630-7024

Specializes in a wide assortment of Mobile Mounting Systems that require NO HOLES. A variety of trunk lid, hatch-back, rain gutter, roof rack and window mounts are available along with low loss coax cable assemblies, for the ultimate mobile station!

For a complete catalog of COMET Antenna products call or visit your local dealer. Or, contact COMET at 800/962-2611. Use COMET products, and enjoy amateur radio to it's fullest!

• Gold-Plated Connectors

• High-Quality Craftsmanship

• Unique Fold-Over Feature

NEW Z750 • Dual-band 146/446MHz w/fold-over • Includes COMET exclusive theft-resistant lock!
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 2 • Length: 39" • Conn: Gold-plated PL-259 • Max Pwr: 200W

NEW Z780 • Dual-band 146/446MHz w/fold-over • Includes COMET exclusive theft-resistant lock!
146MHz 6/8 wave 4.5dBi • 446MHz 5/8 wave x 3.7.2dBi • Length: 62" • Conn: Gold-plated PL-259 • Max Pwr: 150W

NEW SBB-15 • Tri-band 52/146/446MHz w/fold-over
Gain & Wave: 52MHz 0dBi 1/4 wave • 146MHz 4.5 dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: PL-259 • Max Pwr: 120W

NEW SBB-7/SBB-7NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 4.5dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: SBB-7 PL-259/SBB-7NMO NMO • Max Pwr: 70W

NEW SBB-5/SBB-5NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.5dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 3 • Length: 39" • Conn: SBB-5 PL-259/SBB-5NMO NMO • Max Pwr: 120W

SBB-224/SBB-224NMO • Tri-band 146/220/446MHz w/fold-over
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 220MHz 3.5dBi 5/8 wave • 446MHz 6.0dBi 5/8 wave x 2 • Length: 36" • Conn: CX-224 PL-259, CX-224NMO NMO • Max Pwr: 100W

B-20/B-20NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 446MHz 5.0dBi 5/8 wave x 2 • Length: 30" • Conn: B-20 PL-259/B-20NMO NMO • Max Pwr: 50W

B-10/B-10NMO • Dual-band 146/446MHz cellular look-a-like • Gain & Wave: 146MHz 0dBi 1/4 wave • 446MHz 2.15dBi 1/2 wave • Length: 12" • Conn: B-10 PL-259/B-10NMO NMO • Max Pwr: 50W

SMA-3 • 146/446/900MHz HT Antenna • Gain: 146MHz 1.2dBi • 446MHz 1.7dBi • 900MHz 3.4dBi • Length: 9.75" • Conn: Male SMA • Max Pwr: 10W

SMA-503 • 146/446 HT Antenna • Gain and Wave: 146MHz 1/4 wave • 446MHz 5/8 wave • Length: 8.75" • Conn: Male SMA • Max Pwr: 10W

CH-32 • 146/446MHz HT Antenna with an SMA Connector! Gain & Wave: 0dBi 1/4 wave • Max Power: 10 watts • Length: 1.75" • Connector: Male SMA

Improve the performance of your FT-50R or VX-1R with these SMA style antennas. Light-weight and flexible, these antennas provide a substantial improvement!



1275 N. Grove Street • Anaheim • California 92806
(714) 630-4541 • (800) 962-2611 • Fax: (714) 630-7024



CUSHCRAFT

COMMUNICATIONS ANTENNAS

The R7000 is a 10 through 40 meter, no ground radial antenna that is expandable to include 80 meters. It includes the best features of its predecessor the R7 plus many more. R7000 means excellent performance, easy installation and use, slim silhouette and high reliability.

R80 Add-On Kit

80 meters can be easily added to the R7000 with the R80 kit. The kit includes a 40 meter trap, tubing, 80 meter loading coil, UV stable 400 lb. test guy rope and three 20 foot counterpoise wires that attach to your guy points. The R80 counterpoise wires were designed with state-of-the-art anti-resonators to ensure top performance on all bands. The R7000+ with R80 kit is pictured on page 2.

■ EXPANDABLE TO 80M

Transform your R7000 into an R7000+ with R80 kit (trap, tubing, guy & counterpoise wire)

■ RELIABLE

New trap design is stable in all conditions

■ EASY INSTALLATION

For typical use, tuning is not needed

■ AUTOMATIC BAND CHANGING

To any band from 10 through 40m (80m with R80 kit)

■ SLIM SILHOUETTE

Gain favor of family and neighbors with the slim, smooth profile of our new trap design

MODEL	R7000	R7000+ (w/R80 kit)
Frequency, meters	10,12,15,17, 20,30,40	10,12,15,17 20,30,40,80
Gain, dBi	3	3
VSWR	1.2:1 typical	1.2:1 typical
2:1 bandwidth, KHz	10m (1700)	10m (1700)
	12m (100)	12m (100)
	15m (450)	15m (450)
	17m (100)	17m (100)
	20m (250)	20m (250)
	30m (100)	30m (100)
	40m (150)	40m (100)
		80m (70)
Power Rating, Watts	1500	1500
Radiation angle, deg.	16	16
Horizontal rad, deg	360	360
Height, ft(m)	24 (7.3)	34.5 (10.5)
Mast size range, in (cm)	1-3/4 to 2-1/8	1-3/4 to 2-1/8
	(4.4-5.4)	(4.4-5.4)
Wind load, ft ² (m ²)	2 (0.2)	2.5 (.23) antenna
		1.5 (.139) guys
Weight, lb, (kg)	18 (8.2)	24 (10.8)

10, 12, 15, 17, 20, 30, 40 Meters

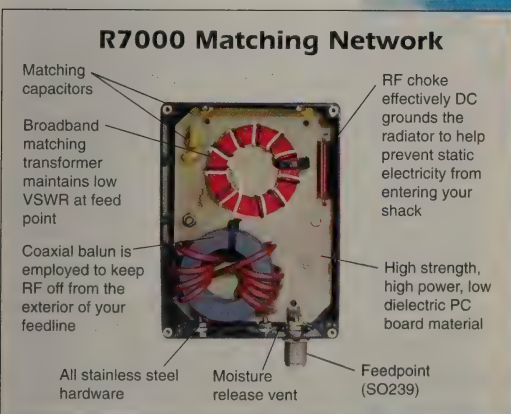
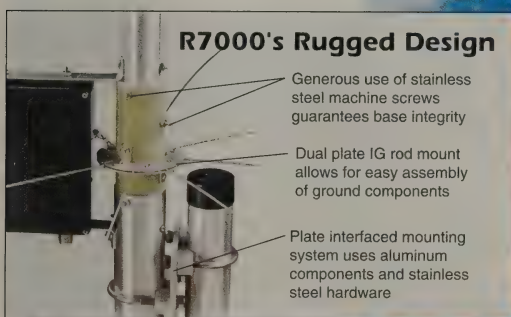
R7000



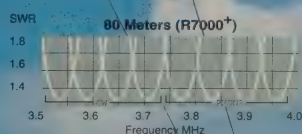
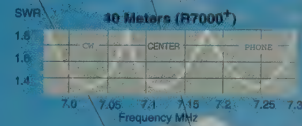
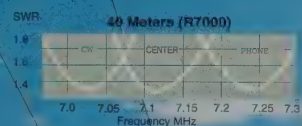
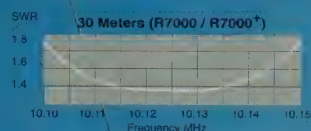
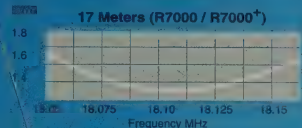
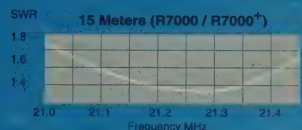
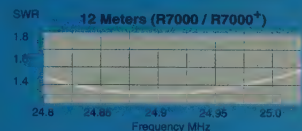
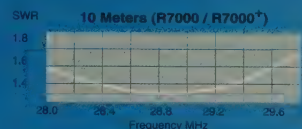
Here's what some of the very first R7000 users have to say.

"The antenna is well built. The instructions are very clear with very helpful diagrams . . . Seven bands right out of the box with no tuning is impressive. . . I really like the construction of this antenna, no loose lockwashers to chase around. All stainless steel hardware is top notch. Keep up the good work." WVOH

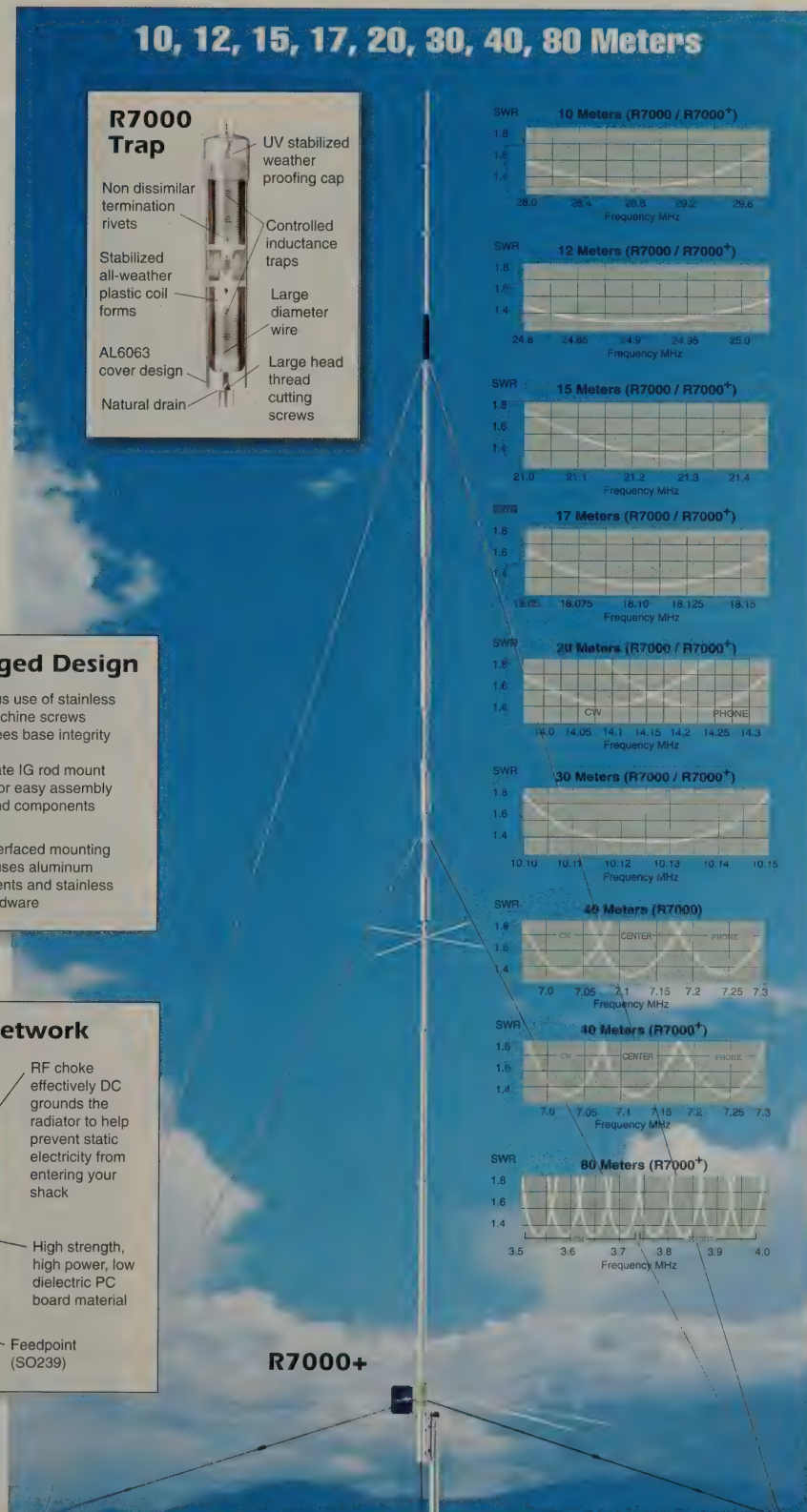
"The R7000 experienced several hours of 50 mph sustained wind with gusts 70 plus mph. I used the R7000 during this time and noticed no difference in performance . . . I was surprised by being able to easily work western European and western African stations on 17m (from North Dakota) "WBØOAJ



10, 12, 15, 17, 20, 30, 40, 80 Meters



R7000+



INTRODUCING R6000

6 - 20 Meters

The Shape of Things to Come

The NEW R6000 is a 6 through 20 meter, no ground radial antenna. It includes many of the features of the R7000, R7 and R5 antennas. R6000 means excellent performance, easy installation and use, slim silhouette and high reliability. There are no traps used on 6, 10 and 15 meters for maximum efficiency and power handling.

EASY INSTALLATION

For typical use, tuning is not required

AUTOMATIC BAND CHANGING

To any band 6 through 20 meters

SLIM SILHOUETTE

Gain favor of family and neighbors with the slim, low profile of the R6000

6 METER OPERATION

Join the fun of the "Magic Band" and take advantage of the new HF/50MHz transceivers

AFFORDABLE PRICE

Cushcraft delivers the best quality and performance at a price no one else can match.

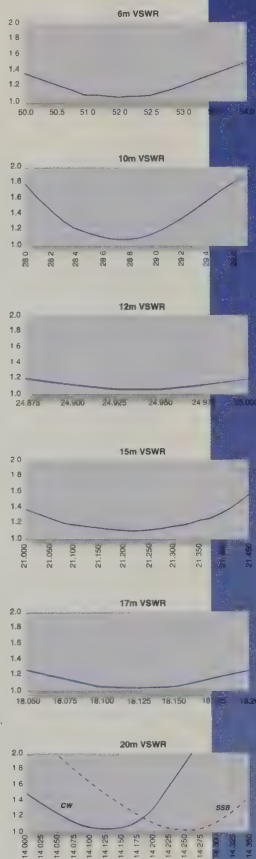
SPECIFICATIONS	R6000
Frequency, meters	6, 10, 12, 15, 17, 20
Gain, dBi	3
VSWR minimum	1.2:1 typical
2:1 bandwidth, KHz	6m >3000 10m >1700 12m >100 15m >450 17m >100 20m 300
Power, Watts output	1500
Radiation angle, deg.	16
Horizontal rad, deg	360
Height, ft (m)	19 (5.8)
Mast size range, in (cm)	1.5 -1.75 (3.8-4.4)
Wind load, ft ² (m ²)	1.5 (.14)
Weight, lb (kg)	12.5 (5.6)

The R6000 employs quarter wavelength stubs on 10 and 15 meters to replace standard trap coils. The result is lower loss and wider bandwidth. The R6000 covers all bands 6 through 15 meters at a VSWR under 2:1. On 20 meters you can select the top 300 KHz or bottom 300 KHz of the band.

The R6000 weighs only 12-1/2 pounds (5.6 kg). It is lightweight and easy to mount for portable or permanent installations. Machined aluminum clamps and UV stable insulators guarantee years of reliable service. The R6000 comes with the standard Cushcraft warranty of one year from purchase - plus the industry's leading technical support team stands behind each Cushcraft antenna.

The R6000 makes an excellent diversity antenna to complement even the most complete stations. Or pack up the R6000 for a trip to the DX location of your dreams. With sunspots on the rise, amateurs worldwide are returning to the HF bands in large numbers. The R6000 will take you there first class for the exciting years ahead.

CUSHCRAFT



BIG THUNDER SERIES TRIBANDERS

10, 15, 20 Meters

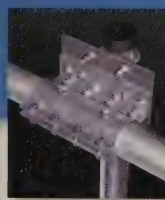
X9 & X7

The new X9 and X7 Triband Yagis are geared to set new standards in both radiating performance and mechanical reliability. Cushcraft's product development team has employed the latest computer modeling technology to achieve a superior electrical design as well as elegant new mechanical hardware and assembly techniques.

Each mechanical component was designed to 100+ MPH wind survival with a 1.25 safety factor. Traps were eliminated from the high current driven elements and reflectors using the new 4L Log Cell design, which yields virtual monoband performance and maximum power handling capability. Traps are employed only in the lower current directors for increased gain and sharper pattern. The result is a truly high performance antenna family which will easily handle the legal limit.



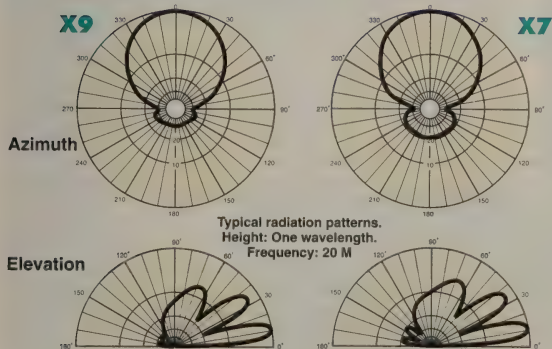
Boom to Mast Clamp



Element to Boom Mounting



- New High Efficiency Computer Optimized Design for Maximum Gain and Ultra Clean Radiating Pattern
- 100+ MPH Construction for Best Reliability and Long Life
- NEW 4L Log Cell Driven Elements for better VSWR Bandwidth
- Trapless Driven Elements and Reflectors for Reliable Power Handling
- Interleaved Element Design for Mono-Band Performance
- Add-on kits available for 40 Meters



SPECIFICATIONS	X9	X7
Frequency Coverage (Meters)	10, 15, 20	10, 15, 20
Total number of Elements	9	7
Maximum Gain (dBi)	20M 13.0 @ 14 deg	12.5 @ 14 deg
@ One Wavelength	15M 13.9 @ 12 deg	13.0 @ 12 deg
	10M 14.0 @ 15 deg	12.9 @ 14 deg
Maximum Front to Back Ratio (dB)	30	30
Number of Elements per Band	4	3
VSWR Minimum	1.1:1	1.1:1
VSWR 1.5:1 Bandwidth (KHz)	20M 350	600
	15M 450	750
	10M 1500	1700
Longest Element, ft (m)	36.5 (11.12)	37.2 (11.33)
Turning Radius, ft (m)	21.7 (6.61)	20.0 (6.09)
Boom Length, ft (m)	28 (8.53)	18 (5.49)
Boom Diameter, in (cm)	2-1/2 (6.35)	2-1/2 (6.35)
Maximum Mast Diameter OD, in (cm)	2-1/2 (6.35)	2-1/2 (6.35)
Maximum Wind Survival, mph (kph)	>100 (>161)	>100 (>161)
Maximum Wind Surface Area, ft ² (m ²)	9.9 (.92)	7.9 (.73)
Windload @ 80 mph, lb (kg)	255 (116)	202 (92)
Maximum Power Handling (KW)	2	2
Weight, lb. (kg)	85 (38.5)	60 (27.2)

CUSHCRAFT

BIG THUNDER HF YAGIS



10 - 20 Meters



Big Thunder Hardware



Boom-to-Mast



Element Hardware

Big Thunder Monobanders

XM240 - 40 Meter 2 Element Yagi. The famous 402CD two element 40 meter beam is now redesigned as the XM240. It features the same contest winning performance with a 90+ mph wind rating. A 2-1/2" OD boom and Big Thunder style 3/16" thick extruded element and boom plates are used to eliminate mechanical failures. A Phillystran boom truss and 1:1 high power balun are included.

XM - 10, 15 & 20 Meter 5 Element Yagis. Cushcraft announces new 5 element Monobanders for 10, 15 & 20 meters. Each XM model has Big Thunder hardware and high wind ratings. Phillystran boom trusses are used on 15 & 20 meter models. The feed systems are 50 ohm direct feed - dual driven elements. VSWR is flat across the band. A high power 1:1 balun is included. Big Thunder Monobanders were Beta tested at three extreme bad weather sites for the winter 1997/1998 season. They have excellent patterns and are perfect for stacks.

	XM240	XM520	XM515	XM510
Frequency, MHz	7.0 - 7.3	14.0 - 14.35	21.0 - 21.45	28.0 - 29.7
Number Elements	2	5	5	5
Forward Gain Free Space, dBi	7.0	9.3	9.3	9.3
Fwd Gain @ 1 Wavelength Ht, dBi @ 14 deg	12.5	14.4	14.4	14.4
Front to Back Ratio, dB	20-25	20-30	20-30	20-30
VSWR Typical Minimum	1.1:1	1.1:1	1.1:1	1.1:1
VSWR 1.5:1 Bandwidth, KHz	150	> 350	> 500	> 1700
Power Rating, Watts Output	1500	1500	1500	1500
3dB Beamwidth, Degrees	70	52	52	52
Side Lobe Attenuation, dB	>35	>40	>40	>40
Boom Length, feet (m)	23	35	24	19
Boom Diameter, inches (cm)	2.5 (6.3)	2.5 (6.3)	2.5 (6.3)	2.5 (6.3)
Longest Element, feet (m)	43 (13.1)	36.3 (11.1)	24 (7.3)	18 (5.5)
Turning Radius, feet (m)	24.3 (7.4)	25.9 (7.9)	16 (4.9)	11.5 (3.5)
Max Mast Size, inches (cm)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)
Wind Surface Area, sq ft (sq m)	5.5 (.51)	9.7 (.90)	5.2 (.48)	3.4 (.32)
Wind Load @ 80 mph, lbs (kg)	142 (64.4)	250 (113.4)	135 (61.2)	90 (40.8)
Weight, lbs (kg)	59 (26.8)	75 (34.0)	45 (20.4)	35 (15.9)



Skylog

- Continuous five band coverage from 13.5 to 32 MHz
- Constant gain over entire frequency range
- 6.4 dBi gain, 65 degree beamwidth
- High efficiency design, antenna stays cool and VSWR steady
- 18 foot boom and 19.5 foot turning radius

MODEL	ASL2010
Frequency, MHz	13.5-32
No. Elements	8
Forward Gain, dBi	6.4
Front to Back Ratio, dB	15-20
SWR 1.2:1 Typical	
2:1 Bandwidth	18.5 MHz
Power Rating, Watts PEP	2000
3dB Beamwidth, Degrees E Plane	65
Boom Length, ft (m)	18 (5.48)
Boom Diameter, in (cm)	2.0 (5.08)
Longest Element, ft (m)	38 (11.58)
Element Ctr Dia., in (cm)	1.25 (3.18)
Turning Radius, ft (m)	19.25 (5.86)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)
Wind Load, ft ² (m ²)	10.1 (.93)
Weight, lb (kg)	55 (25.5)

The ASL2010 log periodic antenna is the most cost effective, high gain, five band antenna solution on the market today. Skylog offers continuous operation from 13.5 to 32 MHz. Antenna gain and beamwidth are constant for uniform coverage from 10 through 20 meters. The ASL2010 is rated for continuous duty at full legal power. Skylog is designed for maximum gain on a manageable 18 foot boom with only 10.1 square feet of wind surface area. All stainless steel hardware and rugged element design are only some of the many features that provide years of superior antenna performance. Skylog ASL2010 is the smart choice for multiband HF operation.

CUSHCRAFT



A4S Four Element Beam - 10, 15 & 20 Meters

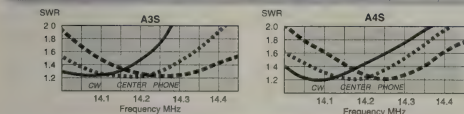
With stainless steel hardware.

The A4S is the true, high performance tribander. Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make the A4S the preferred antenna for your HF work! This is the premium antenna with all the features that you want. High gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps and hardware are stainless steel. The A4S has pinned boom sections and formed aluminum brackets to keep elements straight under all conditions. Our solid construction keeps the A4S on the tower! Add 40 meters with A744 kit.

A3S Three Element Beam - 10, 15 & 20 Meters

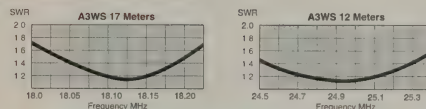
With stainless steel hardware.

The A3 World Ranger, our top selling tribander, has become the A3S with all stainless steel hardware. It's a real power-house in a small space and lets you work the pile-ups with confidence. All you need is a lightweight tower and rotator to enjoy the benefits of the A3S. It's a proven performer in DX-peditions and contests and handles full power for your linear. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware. When space is at a premium, but you want the benefits of a full-size tribander, the A3S is right for you! Add 40 meters with A743 kit.



A3WS WARC Bands 3 Element - 12 & 17 Meters

Enjoy the excitement of the WARC bands with this popular beam. The A3WS gives full performance on 12 and 17 meters. With the addition of our easy-to-use A103 add on kit, it will also cover 30 meters. A3WS needs only a lightweight tower and rotator or you can mount it above an existing tribander. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware.



MODEL	A4S	A3S	A3WS
Frequency, MHz	28, 21, 14	28, 21, 14	24, 18
No. Elements	4	3	3
Forward Gain, dBi	8.9	8.0	8.0
Front to Back Ratio, dB	25	25	25
SWR 1.2:1 Typical			
2:1 Bandwidth KHz	>500	>500	300
Power Rating, Watts PEP	2000	2000	2000
3 dB Beam Width, Deg. E Plane	58	60	60
Boom Length, ft (m)	18 (5.48)	14 (4.27)	14 (4.27)
Boom Diameter, in (cm)	2 (5.10)	1.5 (3.81)	1.5 (3.81)
Longest Element, ft (m)	32 (9.75)	27.75 (8.45)	25.1 (7.66)
Element Center Dia, in (cm)	1.25 (3.18)	1.25 (3.18)	1.25 (3.18)
Turning Radius, ft (m)	18.4 (5.49)	15.4 (4.72)	14.4 (4.4)
Mast Size Range, in (cm)	1.25-2.00 (3.18-5.08)	1.25-2 (3.18-5.08)	1.25-2 (3.18-5.08)
Wind Load, ft ² (m ²)	5.50 (0.51)	4.36 (0.47)	4.1 (0.38)
Weight, lb (kg)	37 (16.8)	27 (12.9)	22.5 (10.2)

30 & 40 Meter Add-On Kits - For A3S, A4S & A3WS

40 meters will come alive by adding one of these kits to the dipole of your A3S or A4S. The kits include high power traps with heavy wall fiberglass insulator and all hardware. A simple adjustment allows 30 meter operation. For our newest beam, the A3WS, we have a 30 meter add on kit the A103.

A743 7 MHz/10 MHz kit for A3S
A744 7 MHz/10 MHz kit for A4S
A103 10 MHz kit for A3WS

MODEL	A743/A744	A103
BAND	7 MHz (40 m) 10 MHz (30m)	10 MHz (30m)
Driven Element with Adapter kit, ft (m)	33.19 min. 35.33 max. (10.12-10.77)	32.1 (8.27-8.66)
Windloading ft ² (m ²)	.58 (.05)	.45 (.04)
Bandwidth, KHz	125	250
Power Rating, Watts	2000 PEP	2000 PEP
Side Rejection, dB	20	20
Weight, lb (kg)	3.44 (1.56)	3.25 (1.47)


Rotatable Dipoles

Our World Ranger Dipoles give bi-directional patterns and rotatable convenience. You can mount them high and away from the trees for better performance than a wire dipole. These single and multi-band dipoles feature high-performance traps, heavy wall tubing, and rugged hardware for years of enjoyment.



MODEL	D40	D41	D31	D3W
Frequency, MHz	7	28,21,14,7	28,21,14	24,18,10
SWR 1.2:1 Typical				
2:1 Bandwidth, KHz	200	>350	>500	>200
Power Rating				
Watts PEP	2000	2000	2000	2000
Length ft (m)	42.25 (12.88)	35.8 (10.92)	25.8 (7.86)	34.0 (10.37)
Mast Size, in (cm)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)
Wind Load, ft ² (m ²)	1.3 (.12)	1.3 (.12)	.9 (.08)	.9 (.08)
Weight, lb (kg)	12 (5)	13 (6)	9 (4)	11 (5)

DUAL BAND RINGOS & YAGIS

 **70 CM, 2 Meters**

Cushcraft is the leader in dual band antennas. Our verticals provide excellent coverage at a price below the competition. The AR270 and AR270B are favorites with the AO27 crowd. For increased coverage, our dual band Yagis lead the way. Both Yagis require only one coax feedline for true dual band performance.

AR270B 5.5/7.5 dB Dual Band Ringo

This model gives very high gain with a low angle of radiation and it is only 7.7 feet (2.35 m) high. The AR270B is computer optimized with two 5/8 wavelength collinear elements on 2 meters and four 5/8 wavelength elements on 70 cm. It is broadbanded for minimum SWR on both bands. It is easy to assemble with three rugged aluminum tubing sections, a durable mast mount and factory sealed coils for best performance.

AR270

3.0 / 5.5 dB Dual Band Ringo

The "Dual Wonder"
AR270 is only 3.75 feet (1.1 meters) high. It has great performance for its size, making it the most popular 2m/70 cm base antenna.

MODEL	AR270		AR270B	
Frequency, MHz	144-148	430-450	144-148	430-450
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	>4	>15	>4	>15
Gain, dBi	3.0	5.5	5.5	7.5
Power, Watts FM	250	250	250	250
Horizontal Radiation Pattern, Degrees	360	360	360	360
Height, ft (m)	3.75 (1.13)		7.7 (2.3)	
Mast Size Range, in	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Radial Length, in (cm)	6.75 (17.1)		6.75 (17.1)	
Wind Load, ft ² (m ²)	0.27 (0.03)		0.47 (0.044)	
Weight, lb (kg)	2 (0.9)		2.4 (1.09)	



Cushcraft pioneered dual band side-by-side Yagis. The harmonic relationship of 2 meters and 70 cm allow clean radiation patterns with minimal interaction.



A27010S and A2706S 10 and 7.8 dB Dual Band Yagis

Increase your range by selecting one of the new Cushcraft dual band Yagis on 2 meters and 70 cm. You can point the antenna at stations while you are in QSO with them. This will direct more of your output power when transmitting at the same time reducing interference and increasing signal strength when receiving. These antennas are perfect for packet applications. Assembly is a snap with our fully illustrated assembly manuals.

MODEL	A27010S		A2706S	
Frequency, MHz	144-148	430-450	144-148	430-450
No. Elements	5	5	3	3
Forward Gain, dBi	10	10	7.8	7.8
Front to Back Ratio, dB	20	18	20	18
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	≥4	≥10	≥4	≥20
Power Rating, Watts PEP	350	350	350	350
3dB Beamwidth, Degrees				
E Plane	52	52	66	66
H Plane	60	60	108	108
Boom Length, ft (m)	6.17 (1.9)		2.8 (.85)	
Longest Element, in (cm)	40.3 (102.4)		41 (104.1)	
Turning Radius, ft (m)	6 (1.8)		2.8 (.85)	
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Wind Load, ft ² (m ²)	.725 (.07)		.3 (.02)	
Weight, lb (kg)	1.8 (.81)		1.7 (.8)	

CUSHCRAFT

Cushcraft Corporation, Manchester, NH

RINGO RANGER II, RINGO RANGER, RINGO



70 CM, 1 1/4 M, 2 M

Our Ringos are Number One.

Tough performers at a good price! The Ringo family of dependable, cost-effective antennas has served more hams - from novice to veteran extra - than any other amateur antenna made. Simple, straightforward design, light weight and quick, easy installation make the durable Ringo family right for you. Ringo's top performance and low cost mean more dB per dollar - an equation anyone can appreciate.

Ringo Ranger II

Our Ringo Ranger II has more gain, less windload, and more mechanical integrity than other two meter antennas. You'll quickly appreciate the benefits of this amazing antenna! Based on the original W1BX Ringo, the Ringo Ranger II is the latest design featuring three 5/8 wave radiating elements and an adjustable 1/8 wave phasing stub. The result is a very low angle of radiation over your coverage area.

The Ringo Ranger II has built-in lightning protection, UV-stabilized insulators, heavy wall tubing, improved decoupling radials to eliminate feedline radiation, and all-weather performance.

MODEL	ARX2B	ARX220B	ARX450B
Frequency, MHz	135-160	222-225	435-450
SWR 1.2:1 Typical			
2:1 Bandwidth, MHz	>3	>5	>10
Gain, dBi	7.0	7.0	7.0
Power Rating, Watts FM	1000	500	500
Radiation Angle, Deg.	7	7	7
Horizontal Radiation			
Pattern, Degrees	360	360	360
Ring Diameter, in (cm)	5 (12.7)	5 (12.7)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	.75 (1.9)	.50 (1.2)
Height, ft. (m)	14 (4.3)	9.3 (2.8)	4.9 (1.5)
Mast Size Range, in (cm)	1.0-1.25 (2.54-3.1)	1.0-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Radial Length, in (cm)	20.5 (52.1)	13.75 (33.7)	6.75 (17.1)
Wind Load, ft ² (m ²)	0.5 (0.05)	0.3 (0.03)	0.2 (0.02)
Weight, lb (kg)	6 (2.7)	5 (2.3)	1 (.45)



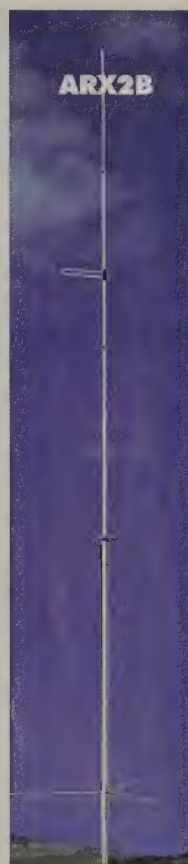
Some hams comment on the ARX2B:

"Since I put this antenna up I have received many compliments on the improvement of my signal." (N3LHP)

"The only antenna I ever installed that worked like it should the first time." (N7PGH)

"ARX2B is a good antenna for my use on 2 meters FM...Several on the air in my area." (N9OPL)

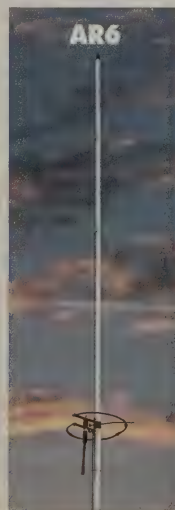
"ARX2B...the best antenna." (XE2CLB)



Ringo

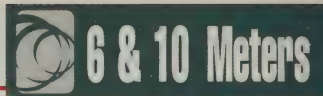
These are the original W1BX FM Ringos. If you want a combination of compact size, wide bandwidth, a low radiation angle, these economical antennas are just for you. Since radials are not needed, you can even use our Ringos indoors. Our Ringos are 1/2 wave and include built-in lightning protection. Put up one of these easily installed antennas and start enjoying FM!

MODEL	AR2	AR6	AR10	AR220	AR450
Frequency, MHz	135-160	50-54	28-29.7	222-225	440-460
SWR 1.2:1 Typical					
2:1 Bandwidth, MHz	10	2	>1.5	10	20
Gain, dBi	3	3	3	3	3
Power Rating, Watts FM	1000	1000	1000	500	500
Radiation Angle, Deg.	16	16	16	16	16
Horizontal Radiation					
Pattern, Degrees	360	360	360	360	360
Ring Diameter, in (cm)	5 (12.7)	13 (33)	13 (33)	5 (12.7)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	1 (2.5)	1 (2.5)	.75 (1.9)	.5 (1.3)
Height, ft. (m)	3.9 (1.2)	10.1 (3.1)	17.6 (5.36)	2.6 (.78)	1.4 (.43)
Mast Size Range, in (cm)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Wind Load, ft ² (m ²)	.21 (.02)	.37 (.03)	1.68 (.16)	.21 (.02)	.1 (.01)
Weight, lb (kg)	1.5 (.68)	2.5 (1.1)	4 (1.8)	1.2 (.55)	1 (.45)



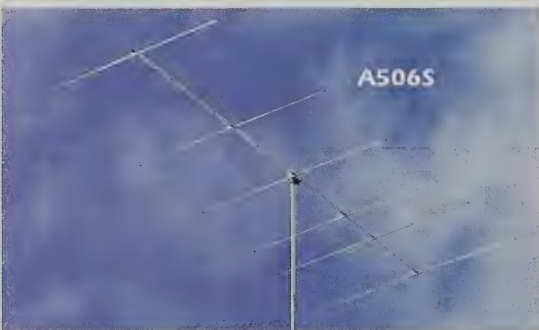
CUSHCRAFT

6 & 10 Meter Yagis



6 Meter Yagis - SSB/CW/FM

Computer-aided modeling and test range techniques were used by Cushcraft engineers to further optimize the performance of our popular 6 meter Yagis. This process means more gain and cleaner patterns with excellent front-to-back ratios. S-models have very broad bandwidth so they will not detune in bad weather. They feature stainless steel hardware for long trouble-free life. Enjoy the new popularity and exciting contacts on the 6 meter band with one of the S-series Cushcraft Yagis. The A503S, A505S and A506S may be mounted vertically for FM use.



6176B

The 6176B is the favorite 6 meter contest/DX antenna for all the "Big guns". Extra wide element spacing gives maximum gain and a clean pattern. Even with a 34 foot (10.4m) boom, the 6176B weighs only 26 pounds (11.8 kg).



10 Meters

Looking for a lightweight, economical alternative to the 10 meter big boys? Choose the TEN3. Although it's popular with novices and technicians, this antenna is for any ham who wants more gain with a good front to back ratio on 10 meters. This antenna has an 8 foot boom (2.4m) making it easy to install on a very simple mount with only a light rotator. The matching system is our proven Reddi-Match for 50 Ohm no balun feed and SO-238 connector. Make more positive contacts with the TEN3.

MODEL	A503S	A505S	A506S	6176B	TEN3
Frequency, MHz	50-54	50-54	50-54	50-51	28-29.7
No. Elements	3	5	6	6	3
Forward Gain, dBi	8	10.5	11.6	14.0	8
Front to Back Ratio, dB	20	24	26	30	25
SWR 1.2:1 Typical					
2:1 Bandwidth, MHz	>1	>1	>1	>1	>1.5
Power Rating, Watts PEP	1000	1000	1000	2000	2000
3dB Beamwidth, Degrees					
E Plane	76	56	48	2 x 19	64
Boom Length, ft (m)	6 (1.8)	12 (3.7)	20 (6.1)	34 (10.36)	8 (2.44)
Longest Element, in (cm)	117 (300)	123 (312)	119 (302)	117 (297.2)	18 (5.49)
Turning Radius, ft (m)	6 (1.8)	7.8 (2.37)	11.5 (3.5)	17.7 (5.39)	9.8 (3.0)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)
Wind Load, ft2 (m2)	1.80 (0.17)	2.9 (0.273)	4.46 (.41)	4.8 (.45)	2.0 (.20)
Weight, lb (kg)	7 (3.2)	11 (5.0)	18 (8.2)	26 (11.79)	9.9 (4.45)

CUSHCRAFT

BOOMER SIDEBAND/CW YAGIS



2 Meters

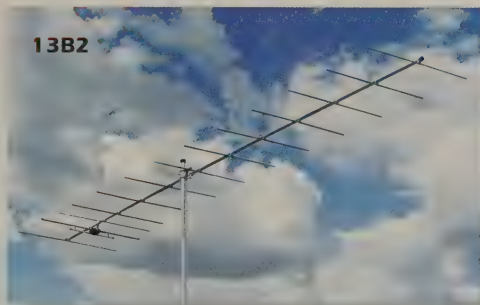
13B2 - 13 Element Wideband Boomer

The 13B2 is as versatile as the 17B2 is specialized. 13B2 will be your choice for high performance across the entire 2 meter band. New and experienced hams will enjoy 15.8 dBi gain on FM, packet, CW, or sideband across the 4 MHz operating range. The 13B2 is easily mounted vertically or horizontally for maximum performance on your favorite mode. Its optimum boom length makes it a popular antenna that fits just about anywhere. The new UltraMatch balanced feed on the 13B2 provides a 50 Ohm match via a standard SO-239 UHF female connector. Model 13B2N has N connector.

17B2 - 17 Element CW/SSB Boomer

The serious two meter operator who is interested in EME, aurora, scatter, SSB, CW, tropo etc, will choose the 17B2. It has 17 elements on a 4.5 wavelength boom. Our computer-aided design supported by precise test range data and the latest manufacturing technology gives you a cleaner pattern and 18 dBi gain in this long boom design. Significant enhancement is provided by the new UltraMatch balanced feed system with N-connector.

The new Cushcraft UltraMatch is a modified T-match system that provides a balanced current distribution on your Boomer. It uses UltraLink teflon® dielectric cable allowing for low loss high power applications. UltraMatch is completely enclosed for weather proofing. UltraMatch features an N-connector on the 17B2 and UHF SO239 on the 13B2. When all weather performance is important, you will choose the new UltraMatched Boomers everytime.



26B2 - 26 Element Wideband Boomer

This antenna offers the highest gain of any 2 meter FM antenna in the world. The 26B2 includes two complete 13B2 antennas, stacking boom and phasing harnesses.

124WB - 4 Element Wideband Boomer

This is the right choice for packet systems and other applications requiring a dedicated directional antenna.



A14810S & A1483S 2M Yagis

These antennas are the newest computer optimized models of our 2 meter Yagis. We have improved both the pattern and gain to give you better FM coverage.

The A1483S is the low priced quality leader for Packet, FM or even portable use. It is easily rear mounted.

A14810S is one of our best value designs with excellent gain and front-to-back ratio. Use it for long range FM or full band 2 meter operation.



MODEL	13B2	17B2	124WB	26B2	A1483S	A14810S
Frequency, MHz	144-148	144-145	144-148	144-148	144-148	144-148
No. Elements	13	17	4	26	3	10
Forward Gain, dBi	15.8	18.0	10.2	18.8	7.8	13.2
Front to Back Ratio, dB	26	26	19	26		
SWR 1.2:1 Typical						
2:1 Bandwidth, MHz	>4	>2	4	>4	>5	≥4
Power Rating, Watts PEP	2000	2000	2000	2000	1000	1000
3 dB Beamwidth, Degrees						
E Plane	2 x 18	2 x 14.5	60	2x18	66	40
H Plane	2 x 19	2 x 15	88	2x9.5	108	46
Side Lobe Atten., dB, E Plane	>60	>60	40	>60		
Boom Length, ft (m)	15 (4.57)	31 (9.45)	4 (1.22)	15 (4.57)	2.8 (.85)	12 (3.6)
Electrical Wavelength	2.2	4.5	.5	2.2		
Longest Element, in (cm)	39.75 (101)	40.75 (103.5)	40.75 (104)	39.75 (101)	41 (104.1)	40.3 (102.4)
Turning Radius, ft (m)	8.9 (2.7)	17.25 (5.26)	4 (1.22)	10.4 (3.18)	2.8 (.8)	6 (1.8)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.25-2 (3.2-5.1)	1.5-2 (3.8-5.1)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)
Wind Load, ft ² (m ²)	1.8 (1.7)	3.9 (.36)	.34 (.034)	4.84 (.45)	.27 (.02)	1.21 (.11)
Weight, lb (kg)	6.7 (.31)	15.75 (7.14)	3 (1.36)	21.5 (9.75)	1.5 (.7)	6 (2.7)

CUSHCRAFT

UHF/VHF YAGIS

70 CM, 1 $\frac{1}{4}$ M, 2 M

A14820T 2 Meter Hi-Lo Cross Yagi

Here's the antenna that solves multi-mode problems! Ten vertically polarized and ten horizontally polarized elements provide 11.1 dBi gain covering 144-148 MHz. The horizontal elements handle your CW and SSB needs, while the vertical elements cover FM. Hardware is stainless steel. Separate coax feeds allow polarization changes.

A14820T has a boom length of 11 ft. (3.4m), longest element length of 40.6 in. (103cm), wind area of 1.21 ft² (.11m²), and a mast size of 1.25-2 in. (3.2-5.1 cm).



225WB



224WB



A4496S

A4496S/A44911S

Use one of these 440 MHz beams for your FM/Packet needs. Both work great for vertical or horizontal polarization.



A44911S



719B

719B FM, CW and SSB 15.5 dBi

Looking for an antenna to enhance performance on all modes of the 70 CM band? The 13.5 foot long 719B is the right choice. Mount it vertical for FM or horizontal for CW and Sideband. The 719B joins the 2 meter 13B2 as a classic for improved performance.



A14820T

224WB/225WB 220 MHz Widebands

These 222 MHz beams are perfect for Packet, FM repeaters, or sideband/CW. Both antennas can be mounted for vertical or horizontal polarization.

MODEL	224WB	225WB
Frequency, MHz	222-225	222-225
No. Elements	4	15
Forward Gain, dBi	10.2	15.5
Front to Back Ratio, dB	24	24
SWR 1.2:1 Typical		
2:1 Bandwidth, MHz	>5	>5
Power Rating, Watts PEP	2000	2000
3dB Beamwidth, Degrees		
E Plane	60	2x17
H Plane	88	2x19
Side Lobe Attenuation, dB E Plane	40	60
Boom Length, ft (m)	3 (.91)	10 (3.05)
Electrical Wavelength	0.5	2.2
Longest Element, in (cm)	26.7 (68)	26.3 (67)
Turning Radius, ft (m)	3 (.91)	5.8 (1.78)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)
Wind Load, ft ² (m ²)	.23 (.021)	.95 (.09)
Weight, lb (kg)	1.7 (.77)	5.25 (2.4)

MODEL	719B	729B	A4496S	A44911S
Frequency, MHz	430-450	430-440	440-450	440-450
No. Elements	19	29	6	11
Forward Gain, dBi	15.5	17.8	10.5	13.2
Front to Back Ratio, dB	25	25	18	20
SWR 1.2:1 Typical				
2:1 Bandwidth MHz	20	>10	>10	>10
Power Rating, Watts PEP	2000	2000	350	350
3 dB Beamwidth, Degrees				
E Plane	24	20	60	48
H Plane	19	22		
Side Lobe Atten., dB, E Plane	60	60		
Boom Length, ft (m)	13.5 (4.1)	22.17 (6.75)	2.9 (0.89)	4.2 (1.35)
Electrical Wavelength	6	9.8		
Longest Element, in (cm)	13.75 (34.9)	13.75 (34.9)	13 (33)	13 (33)
Turning Radius, ft (m)	7.25 (2.2)	12.5 (3.8)	2.9 (.89)	2.8 (.85)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)	1.25-2.0 (3.2-5.1)	1.25-1.5 (3.2-3.8)
Wind Load, ft ² (m ²)	1.2 (.11)	2.2 (.21)	0.30 (0.03)	0.39 (0.04)
Weight, lb (kg)	5.6 (2.55)	8.6 (3.9)	3 (1.4)	4 (1.8)

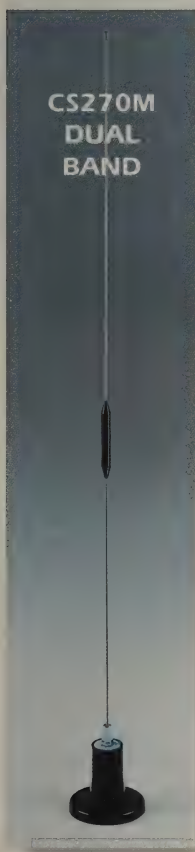
CUSHCRAFT

MOBILE ANTENNAS

70 CM-10 Meters

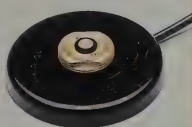
Cushcraft mobiles offer the high performance that you need for consistent mobile communications such as commuting and public service activities. These antennas are the choice of hams and communications professionals around the world who demand high quality, premium products.

SEE YOUR LOCAL DEALER'S CUSHCRAFT MOBILE DISPLAY



BLACK MAG MOUNT

CSMG



TRUNK LIP MOUNT

CSSTL



CS28M Ten Meter Mag-Mount

The CS28M ten meter mag-mount has become a constant companion to today's popular 10 meter multimode mobile rigs. The CS28M comes complete, ready to go with a 49" stainless steel whip and a Euro-Style black poly-coated 90 pound pull magnet. A heavy rubber pad protects your car's finish; twelve feet of Cushcraft's own UltraLink® low-loss cable (specifically designed for commercial mobile applications to 900 MHz) and PL259 connector are included with the CS28M.

CS Series Economy Mobile Antennas

Cushcraft's years of commercial and amateur experience apply cutting-edge designs to consistently high quality materials to produce the best mobile antennas you can buy.

All inductors and coil contacts are silver plated for better RF conductivity. All Cushcraft mobile hardware is brass to prevent the seizing inherent with inferior, dissimilar-metal joints. Our mobile coil housings are ABS, impervious to temperature changes and ultraviolet radiation. Brass base threads, ultrasonically welded into coil housings, eliminate premature failures associated with inferior fastening techniques, and Cushcraft insert-molded 440 MHz phasing coils assure weather-tight integrity. Only Cushcraft mobile antenna mounts are entirely 50 Ohms, eliminating lossy "VSWR bumps" common in many well known designs.

UltraLink® Cable

Cushcraft UltraLink cable was designed specifically for high efficiency commercial mobile applications to 900 MHz. UltraLink's RG-58 size allows easy installation through the tightest openings, while its Teflon® dielectric provides the highest temperature tolerance to handle vehicle hot-spots that would melt other dielectric materials. Additional 100% shielding is provided by a jacket of easy-peel foil. All this is covered by 97% braid for easy, secure connector attachment. More of your signal will get through with UltraLink than with any other mobile cable.

CS270M Dual Band Mag-Mount

The CS270M 2 meter/70 cm dual band mobile antenna leads the industry in performance, quality and value. The weather sealed base, stainless whip, enclosed coil and 90 pound pull magnet at such a low price is a real bargain.

CSMG, CGMG Magnetic Mounts

Cushcraft mag-mounts stay where you put them. Our 90 and 165 pound pull magnets are the best you'll find. Euro-style black poly finish protects against rust, and a tough rubber pad gives maximum protection to your vehicle's finish. UltraLink® cable on all Cushcraft mobile antennas means more of your signal reaches your antenna every time you key the mike.

Model No.	Frequency MHz	Whip Length Inches	Whip Length Meters	Description
Dualband 2m/70cm				
CG270A	144-148 & 430-450	34	0.86	NMO mt required (CGMG, CGMGN)
CS270A	144-148 & 430-450	34	0.86	NMO mount required
CS270M	144-148 & 430-450	34	0.86	NMO, includes Magnet Mount
10 Meters				
CS28M	28-30	49	1.25	NMO, includes Magnet Mount
6 Meters				
CS50M	46-54	49	1.25	NMO, includes Magnet Mount
2 Meters				
CG144A	144-148	49	1.25	NMO mount required
CS147A	144-148	49	1.25	NMO mount required
CS147M	144-148	49	1.25	NMO, includes Magnet Mount
222 MHz				
CS220M	222-225	33	0.84	NMO, includes Magnet Mount
440 MHz				
CS450M	430-450	29.5	0.75	NMO, includes Magnet Mount
Mobile Mounts				
CSMG	90 lb pull magnet, NMO mount, PL259 & 12 feet UltraLink Cable			
CSMGN	90 lb pull magnet, NMO mount, N connector & 12 feet UltraLink Cable			
For "Gold" Antennas				
CGMG	165 lb pull magnet, NMO mount, PL259 & 12 feet UltraLink Cable			
CGMGN	165 lb pull magnet, NMO mount, N connector & 12 feet UltraLink Cable			
CSSTL	Trunk lid mount, NMO mount, PL259 & 12 feet UltraLink Cable			

CUSHCRAFT



Fast Acting Gas Discharge Lightning Arresters

Protect your valuable equipment from unplanned current surges with a Cushcraft constant impedance LAC4 arrester! The LAC4 has a replaceable gas discharge tube which clamps voltage surges to less than 50 volts in about 100 nanoseconds-much quicker than the voltage rise time of lightning.

You cannot afford to be without lightning protection. One of the models below is right for your shack.

With UHF connector models - 1 MHz to 500 MHz.

With N connector models - 1 MHz to 3000 MHz

LAC4	200 Watt with UHF SO-239 connectors
LAC4H	2 kW with UHF SO-239 connectors
LAC4N	200 Watt with N connectors
LAC4NH	2 kW with N connectors
LC2	200 Watt replacement cartridge
LC2KW	2 kW replacement cartridge



Power Dividers For Boomers

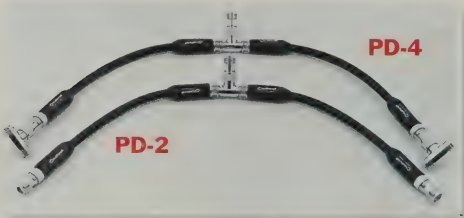
Our power dividers make it a snap to stack Cushcraft Boomers. Models for 17B2 have N-connectors. They are available for these antennas:

PD-2	for two 13B2, UHF connectors
PD-2N	for two 17B2, N connectors
PD-4	for four 13B2, UHF connectors
PD-4N	for four 17B2, N connectors

Stacking Harnesses For Boomers

For even easier installation of our Boomers, use our installation kits that are complete with harness and power divider. Models for 17B2 have N-connectors.

22-SK	for two 13B2's
22N-SK	for two 17B2's
26B2VPK	stacking kit for two 13B2's. Harnesses, stacking boom and hardware included.



- ▶ One year warranty backed by our 40 years of antenna experience.
- ▶ Cushcraft antennas are designed to survive 80 mph (129 kph) winds unless otherwise noted.
- ▶ For safe antenna installations, avoid contact with powerlines.
- ▶ The use of lightning arresters is highly recommended.
- ▶ Stainless steel hardware and high grade seamless 6063-T832 tubing used in all antennas.
- ▶ Support mast, feedline and RF chokes are not included with antennas.
- ▶ Specifications are subject to change without notice.
- ▶ All Cushcraft antennas are available through dealers worldwide.

BOOMER STACKING INFORMATION

Antenna	2x617-6B	2x13B2	4x13B2	2x17B2	4x17B2
Forward Gain, dBi	17.0	18.8	21.8	21.0	24.0
Front/Back Ratio	30	24	24	24	24
E-Plane Beamwidth, deg	2x17.5	2x18	2x9	2x14.5	2x7.3
H-Plane Beamwidth, deg	2x10	2x9.5	2x9.5	2x7.5	2x7.5
Vert, ft	26	9.2	9.2	11.5	11.5
(m)	7.92	2.8	2.8	3.5	3.5
Horiz, ft	-	-	9.6	-	12
(m)	-	-	3.0	-	3.7
Approximate Wt, lb	62	22	44	32.5	115
(kg)	28.12	10.00	20.00	14.8	52.3

DIAMOND ANTENNAS

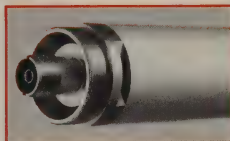
The Standard By Which All Others Are Judged.

Acclaimed as the technological leader in single & multiband antennas

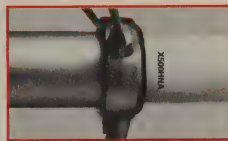
- Wide-band Performance • Factory Adjusted—No Tuning Required • Highest Gain
- UPS Shippable • High Wind Rating • Fiberglass Radome • DC Grounded • Stainless Hardware

X500HA (UHF-Conn.) X500HNA (Type-N Conn.)

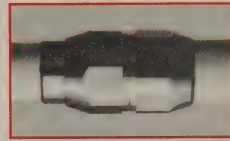
**Ruggedized
Base/Repeater
Antenna**



COAX CONNECTION
AT BASE END



HEAVY DUTY BASE/
RADIAL ASSEMBLY



STRONG JOINT
COUPLINGS

X50NA

The New X50NA is an excellent choice where ruggedness is required in a medium-gain, dual-band, base/repeater application.

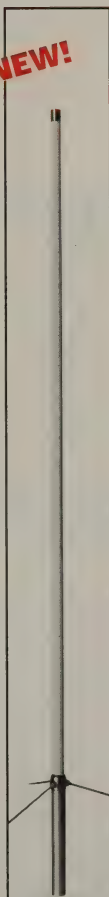
Features

- Wide frequency bandwidth
- Heavy duty fiberglass radome
- Stainless steel mounting hardware and radials
- Type-N Cable connection
- Compact size for easy mounting/installation

Specifications:

Freq.: 2m: 144–148MHz
70cm: 440–450MHz
Gain: 2m: 4.5dB; 70cm: 7.2 dB
Power: 200 watts
Wind Rating: 135 MPH (no ice)
Height: 5.6 feet

NEW!



X50NA



X500HNA

X500HNA

Diamond Antenna's best base station repeater antenna. Designed for strength and performance, the X500HNA is pretuned to achieve maximum gain in both the 2m and 70cm amateur bands.

Features

- Heavy duty fiberglass radome
- Overlapping outer shells for added strength
- Stainless steel mounting hardware and radials
- Strong—waterproof joint couplings
- Type-N Cable connection
- Wide band performance

Specifications:

Freq.: 2m: 144–148MHz
70cm: 440–450MHz
Gain: 2m: 8.3dB; 70cm: 11.7 dB
Power: 200 watts
Wind Rating: 90 MPH (no ice)
Height: 17.8 feet

DIAMOND Mono-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
CP22E ¹	144	6.5	200	UHF	9.0	90
DPGH62 ^{1,4}	50	6.0	200	UHF	21.0	78
F22A	144	6.7	200	UHF	10.5	112
F23A	144	7.8	200	UHF	15.0	90
F142A	222	5.5	150	UHF	6.0	110
F718A ²	440	11.5	250	N	15.0	90
F1230A	1240	13.5	100	N	10.5	90

DIAMOND Dual-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
X50A	144/440	4.5/7.2	200	UHF	5.6	135
X50NA	144/440	4.5/7.2	200	N	5.6	135
X200A	144/440	6.0/8.0	200	UHF	8.3	112
X300A	144/440	6.5/9.0	200	UHF	10.2	112
X510NA ³	144/440	8.3/11.7	200	N	17.2	90
X510MA	144/440	8.3/11.7	200	UHF	17.2	90
X500HA	144/440	8.3/11.7	200	UHF	17.8	90+
X500HNA	144/440	8.3/11.7	200	N	17.8	90+
X700HA	144/440	9.3/13.0	200	UHF	24.0	90
X700HNA	144/440	9.3/13.0	200	N	24.0	90
X2200A	144/222	6.0/7.8	150	UHF	11.5	112
U200A	440/1240	8.3/11.7	100	N	5.9	135

DIAMOND Tri-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
U5000A	144/440/1240	4.5/8.3/11.7	100	N	5.9	135
V2000A ^{4,6}	52/144/440	2.1/6.2/8.4	150	UHF	8.3	110
X3200A ⁵	146/222/440	6.0/7.8/8.0	100/200	UHF	10.5	112
X6000A	144/440/1240	6.5/9.0/10.0	100/60	N	10.5	112

¹ Heavy duty aluminum construction.

² F-718A: 440–450MHz, F-718J: 430–440MHz, F-718L: 420–430MHz.

³ X510N: 144–147/430–440MHz.

⁴ 1/4", rated in dB.

⁵ 2m: 146–148

⁶ 52–54MHz only; DPGH62 adjustable from 50–54MHz.

Most requirement: 1.4"–2.4".

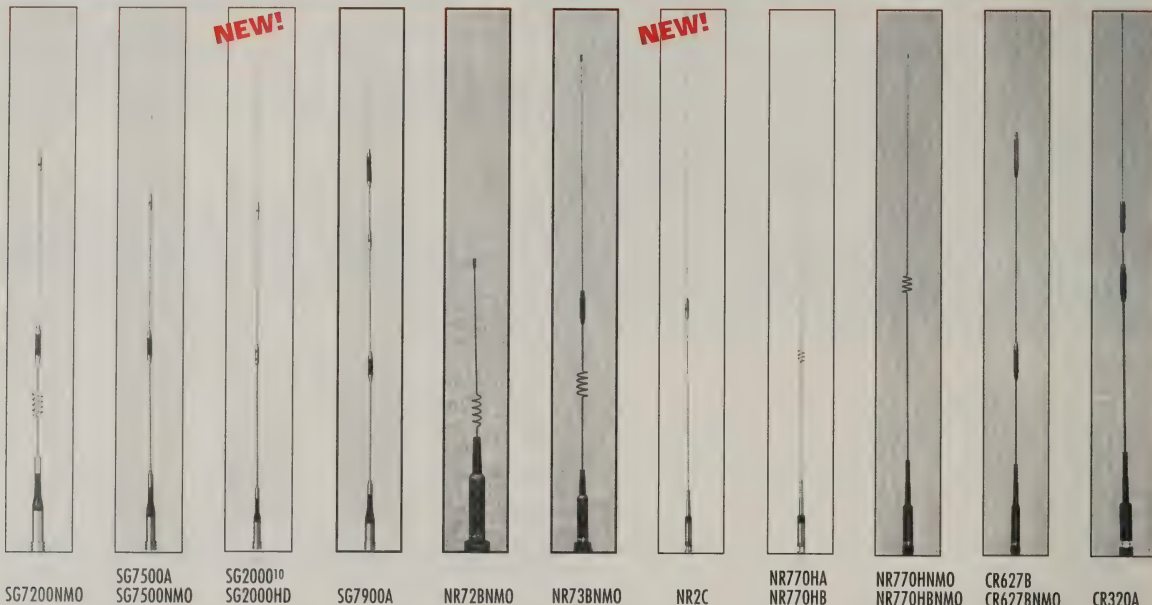
BAND: 144–144.148MHz, 222–222.225MHz, 420–420.430MHz, 430–430.440MHz, 440–440.450MHz, 1240–1240.1300MHz.

DIAMOND'S STATE-OF-THE-ART

VHF/UHF Mobile Antennas-

Maximum Performance Without Compromise

You've seen the rest...now own the BEST!



SG7200NMO

 SG7500A
 SG7500NMO

 SG2000*10
 SG2000HD

SG7900A

NR72BNMO

NR73BNMO

NR2C

 NR770HA
 NR770HB

 NR770HNA
 NR770HNMO
 NR770HBNMO

 CR627B
 CR627BNMO

CR320A

SPECIAL FEATURES:

- Factory pre-tuned/no adjustment
- Highest Performance antennas
- NMO and UHF (PO) base styles
- 24 Kt gold plated connector pin
- No grounding required unless noted
- Fold-over feature on most models



FOLD-OVER

Patented One-Touch Fold-over Feature
 (Not available on NR72BNMO, NR73BNMO,
 & NR770SA.)

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
NR72BNMO*6	2m/70cm	2.15	100	NMO	13.8	1/4λ, 1/2λ
NR73BNMO	2m/70cm	2.15/5.3	100	NMO	33.5	1/2λ, 1-5/8λ
NR770SA*6	2m/70cm	2.15/2.15	100	UHF	16.9	1/4λ, 1/2λ
NR770HA7	2m/70cm	3.0/5.5	200	UHF	40.2	1/2λ, 2-5/8λ
NR770HNMO*8	2m/70cm	3.0/5.5	200	NMO	38.2	1/2λ, 2-5/8λ
NR770RA	2m/70cm	3.0/5.5	200	UHF	38.6	1/2λ, 2-5/8λ
NR790A*	2m/70cm	4.5/7.2	120	UHF	57.5	6/8λ, 3-5/8λ
SG7000*6	2m/70cm	2.15/3.8	100	UHF	18.5	1/4λ, 6/8λ
SG7200NMO	2m/70cm	3.2/5.7	150	NMO	36.6	1/2λ, 2-5/8λ
SG7500A	2m/70cm	3.5/6.0	150	UHF	40.6	1/2λ, 2-5/8λ
SG7500NMO	2m/70cm	3.5/6.0	150	NMO	41.0	1/2λ, 2-5/8λ
SG7900A*	2m/70cm	5.0/7.6	150	UHF	62.2	7/8λ, 3-5/8λ
SG9600*6,9	6m/2m/70cm	-2.15/5.2	60	UHF	33	1/4λ, 1/2λ, 2-5/8λ

1/4λ, rated in dBi.

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
NR2C	2m	4.1	150	UHF	55.5	1/2λ+1/4λ
SG2000*10	2m	5.2	150	UHF	62.6	1/2λ+3/8λ
SG2000HD*	2m	5.2	250	UHF	62.6	1/2λ+3/8λ
SG6000NMO*6,9	6m	2.1	150	NMO	39	1/4λ
NR140A	1-1/4m	3.8	100	UHF	36.2	5/8λ
NR124	23cm	8.4	100	N	25	4-5/8λ
CR2145*6	2m/1-1/4m	2.15/3.4	120	UHF	37	1/2λ, 5/8λ
CR224A*6	2m/1-1/4m	5.0/6.0	150	UHF	68.5	7/8λ, 2-5/8λ
CR320A*6	2m/1-1/4m 70cm	2.15/3.8/ 5.5	200 100/200	UHF	37.4	1/4λ, 1/2λ, 2-5/8λ
CR627B*6,9 CR627BNMO*6,9	6m/2m/ 70cm	2.1/4.5/ 5.5	120 100/200	UHF NMO	60	1/4λ, 1/2+1/4λ/ 2-5/8λ
NR2000NA	2m/70cm 23cm	3.15/6.3/ 9.7	100	N	39	1/2λ, 2-5/8λ, 5-5/8λ

* Not recommended for Magnet Mount

6 Grounding required.

7 NR770HB some specifications but in black finish.

8 NR770HBNMO same specifications but in black finish.

9 52-54MHz only



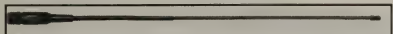
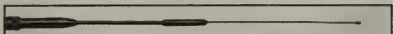
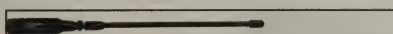
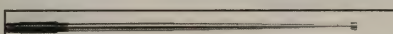
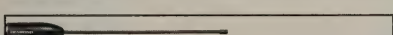
10 Quantities Limited.

DIAMOND Antenna Accessories

High Efficiency HT & Scanner Antennas HF Multiband Vertical Antenna HF/VHF Multi-band Mobile Antenna

RH Series

High quality, high gain HT antennas for mono, dual, and tri-band handheld radios. Available in both BNC and SMA connections. Increase the performance on your handheld or wideband scanner with a Diamond RH Series antenna.

RH3		SRH805		SMA
RH77CA				
RH951S				
RH707				
RH205				
SRH519 & SRH815				SMA

MODEL	DESCRIPTION	RELATIVE GAIN*
D130J	Wideband discone 25-1300 MHz. 200 W transmit 50-1300 MHz. No cable.	N/A
RH3	2m/70cm dual band "Black Bullet" HT antenna. 1.75" BNC. 120 to 900 receive	-2 dB
RH77CA	High gain 2m/70cm dual band HT antenna. Receive range to 900 MHz. BNC.	+6 dB
RH205	2m HT antenna, telescopic, 5/8 λ , fully extended, 47.5"; 1/4 λ , retracted, 9"	+9 dB
RH519	2m/70cm slim dual-band HT antenna. Flexible. 8" BNC, 10 watts.	+3 dB
RH707	2m/70cm dual-band -tiltable whip - HT antenna. 8 1/4" BNC.	+3 dB
RH951S	High gain 2m/70cm/23cm slim tri-band HT antenna. Flexible. BNC (Wide band receive)	+6 dB
SRH519	2m/70cm dual-band HT antenna. Flexible. 8" SMA, 10 watts.	+3 dB
SRH805	2m/70cm/23cm tri-band HT antenna. 1.75" SMA, 10 watts.	-2 dB
SRH815	2m/70cm/23cm tri-band HT antenna. Flexible. 6" SMA, 10 watts.	+3dB

*Rated against typical stock HT antennas.

D130J Super Discone Antenna

The D130J Super Discone Antenna is an ultra-wideband antenna covering amateur radio, air traffic control and other utility bands. Rust-free stainless steel is employed in major component parts.

Specification

Frequency range	25 to 1300 MHz receive 100 to 1300 MHz transmit 50-54 (tunable) 1.7m (66.9") 1kg (2.2 lbs.)
Length	0.41 m (16.1)
Weight	25 to 52mm (.098) to 2.05") mounting brackets supplied
Max. length	200 w, 100-1300 MHz
Max. Power	50w, 50 MHz



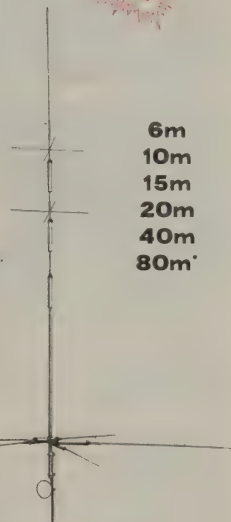
CP SERIES HF MULTIBAND VERTICAL

The CP5 and CP6 are multi-band trap-vertical antennas for HF bands, covering the 80 λ , 40, 20, 15 & 10m amateur bands. The CP6 also includes the 6m band. Made from heavy-duty aluminum, the CP5 & CP6 are easily assembled, yielding excellent performance and reliability from a compact base station antenna. No additional ground radials required. All mounting hardware included.

Specifications

Frequency:	CP5 80 λ /40/20/15/10m CP6 80 λ /40/20/15/10/6m
Power:	200w PEP
Impedance:	50 Ω
VSWR:	1.5:1 nominal
Element:	1/4 wave trap vertical
Radials:	Trap design CP5 - five CP6 - six
Grounding:	Direct grounding. Antenna element & radials connected to mounting pipe.
Max. Wind Rating:	80mph (no ice)
Mast Diameter	
Accutance:	1.2-2.4"
Overall Length:	15.10' (4.6m)
Weight:	9.9lbs. (4.9kg)
Connector:	SO-239 female UHF
Bandwidth:	80m 20kHz (for nominal 40m 40kHz 1.5:1 VSWR 20m 100kHz without 15m 200kHz antenna 10m 500kHz tuner) 6m 3.5MHz

NEW



DIAMOND MV3A MOBILE ANTENNA SYSTEM

For the new HF/VHF transceivers.

OPTIONAL LOADING COILS

HVC7	40m
HVC14	20m
HVC18	17m
HVC21	15m

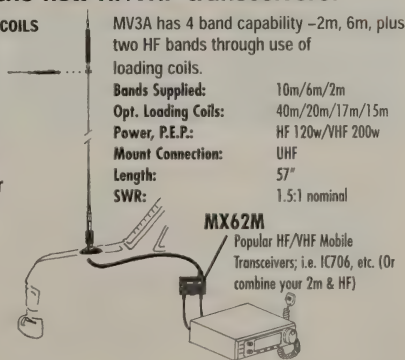
Recommended Antenna Mounts: K400 or K600M

MX62M Duplexer

Specifications:	
HF/6m & 2m bands	
1.6-56 MHz LPF	
76-470 MHz HPF	
(76-120 receive only)	
Watts: 600 P.E.P.	
Loss: 0.2 dB LPF	
0.3 dB HPF	
Isol: 50 dB	

MV3A has 4 band capability -2m, 6m, plus two HF bands through use of loading coils.

Bands Supplied:	10m/6m/2m
Opt. Loading Coils:	40m/20m/17m/15m
Power, P.E.P.:	HF 120w/VHF 200w
Mount Connection:	UHF
Length:	57"
SWR:	1.5:1 nominal

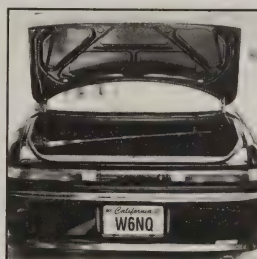
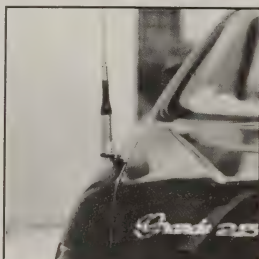


DIAMOND'S Premium Antenna Mounts & Cable Assemblies

Designed for today's high performance antennas

DIAMOND'S Hide-away Antenna Mount

As easy as 1, 2, 3— the K601 Hide-Away Mount folds antenna safely into the trunk. Fully adjustable, fits most vehicles.

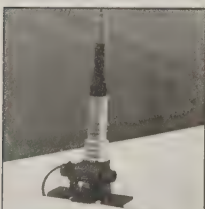


K601 HIDE-AWAY TRUCK MOUNT

Color: Black. Choice of NMO or UHF base.
Recommended antennas:

NR2C, NR73BNMO, NR770HNMO, NR770HA
NR770HBNMO, NR770HB, NR770RA,
SG7200NMO, SG7500A & SG7500NMO.

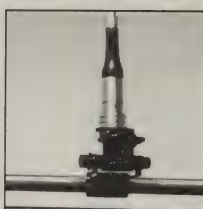
K601M—UHF Base K601NMO—NMO Base
C110 10' extension cable for front radio installations.



K600 Variable Angle Trunk Mount

Deluxe aerodynamic trunk mount.
Vertical adjustment range 0-9%.
Four set screw, stainless steel mount assembly.

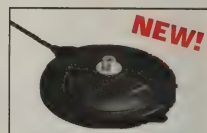
K600M SO-239 base, 16.5' coax & PL-259
K600P SO-239 base, 16.5' coax & type N



K550 Luggage Rack Mount

Adjustable luggage rack mount for new mini vans.

K550KM SO-239 base, 16.5' coax & PL-259
K550 Mount Only



K702M Magnet Mount Base

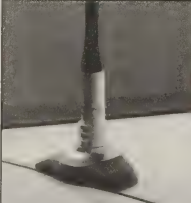
Deluxe low profile magnet mount with high holding power. Aerodynamic styling, large 6 3/8" diameter, 3/4" height. For VHF/UHF antennas up to 50" height. Includes thin mylar protective sheet to enhance grip and protect vehicle paint. Cable: 13' RG58A/U & PL-259.

K400 Hatchback/Door Truck Lid Mount

Diamond's deluxe heavy duty mount. Two-axis adjustable. Recommended for high gain VHF/UHF antennas.

K400C* SO-239 base, 6.5' coax & PL-259
K400CNMO* NMO base, 6.5' coax & PL-259
K400N Type-N base, 13.5' coax & Type N

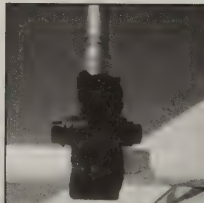
* Use C110 for front radio installations



K540 Mirror/Luggage Rack Mount

Adjustable Mirror/Luggage rack mount accepts 1/2" to 7/8" tubing. Fits most mirrors and utility racks.

K540KM SO-239 base, 16.5' coax & PL-259
K540 Mount Only



C-SERIES CABLE ASSEMBLIES



C101
SO-239 base, 6.5' RG316 Teflon coax & PL-259. Ideal cable assembly for trunk mount/remote head installations.

C101NMO
Same as C101 with NMO base. For Diamond's K-Series mounts only.

C213
Same as C101 with 13.5' cable assembly.



C110
Extension cable for C101. 10' RG8X coax w/mini UHF connectors. Use C110 to extend cable to 16.5' for most front radio installations.

C110BNC
10' assembly similar to above, uses RG316 Teflon coax terminating in BNC-male.



C211
SO-239 base, 16.5' cable assembly & PL-259. Combination of C101 & C110.

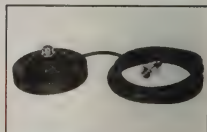
K400-3/8 C Special Trunk Mount for 3/8 x 24 Thread Antennas

Ideal mount for Outbacker Perth, OB Jr., and other medium weight antennas.

Note: Use C110, 10ft extension for front radio installation

Adjustment: 2 axis
Power: 350 watts RMS
500 w P.E.P.
Cable: 6 1/2' RG316 Teflon coax w/PL-259

Spring recommended for stiff/heavy antennas



SPM35 Magnet Mount Base

Heavy duty 2.2 lb./4" magnet mount rated 25-500 MHz. Cable: 13' coax and PL-259. Recommended for antennas under 45".

SPM-NMO Magnet Mount Base

Similar to the SPM35, but has NMO mount.

DIAMOND Antenna Accessories

Motorized Mount

SWR/Power Meters

Dummy Load & Coaxial Switches

Duplexers/Triplexers



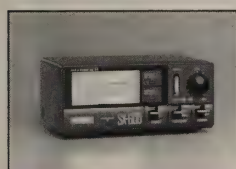
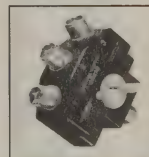
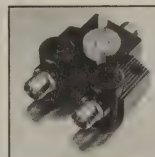
K9000 Motorized Mount

Raise and lower your antenna with a touch of the button with Diamond's New K9000 motorized mount.

- K9000TM. Trunk & hatchback installations.
- K9000LRM. Luggage rack installations.
- Accepts "Ground Independent" Antennas up to 45" Length.
- 0-90° Range. Operates from 12VDC with fused cigarette plug.
- Compatible with Diamond C-Series Base/cable assemblies.
- Recommended Antennas: SG7200NMO, SG7500NMO, NR73BNMO, SG7500A, NR2C & NR770 Series.

SWR/POWER METERS

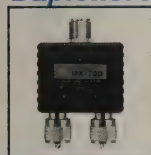
Diamond Antenna Meters measure forward and reflected power and SWR. Illuminated meter, sensor switch and LED indicator. Power ratings listed are for intermittent operation. SX600 and SX1000 are designed with 2 sensors for multiradio operation. Minimum power for VSWR test 4w; SX-100 20w. 12 VDC @ 50 mA is required for meter lamp only. 6" w x 2" h x 4" d, 2 lbs.



MODEL	FREQ. (MHz)	POWER RANGES	SENSORS	CONNECTOR
SX-100	1.6-60	30/300/3000	1	SO-239
SX-200	1.8-200	5/20/200	1	SO-239
SX-400	140-525	5/20/200	1	SO-239
SX-600	1.8-200	5/20/200	2	*1 - SO-239
	140-525			*2 - SO-239
SX-1000	1.8-160	5/20/200	2	*1 - SO-239
	430-450/800-930/1240-1300			*2 - Type N

MODEL	DESCRIPTION
CX210A	Heavy duty wideband coax switch, DC-1000 MHz. 1.5 kW, SO-239
CX210N	Heavy duty wideband coax switch, DC-1500 MHz. 1.5 kW, Type N
CX310A	Heavy duty wideband coax switch, 3 position, DC-800MHz, SO-239
DL30A	Dummy load, DC-500 MHz. 15w average/100w peak. PL-259

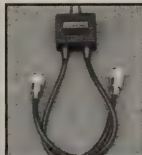
Duplexers/Triplexers



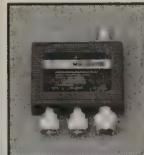
MX-72D



MX-72H/N



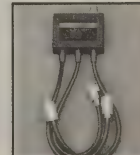
MX-214



MX3000D



MX62M

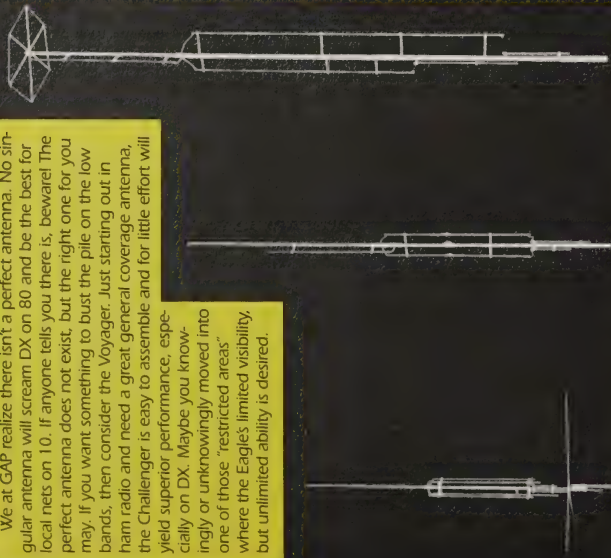


MX324

MODEL	MX37	MX72D	MX72H	MX72N	MX214	MX214D	MX324	MX324D	MX2000	MX2000D	MX3000	MX3000N	MX3000D	MX62M			
FREQUENCY BAND (MHz)	1.6-470 900-1300	LPF 1.6-30 140-150		HPF 400-460	140-150 220-225		LPF 1.5-150	BPF 220-225	HPF 400-550	LPF 1.6-60	BPF 110-170	HPF 300-950	LPF 1.6-160	BPF 350-500	HPF 850-1300	LPF 1.6-56	HPF 76-470
PWR CW (KAS) WATTS P.E.P.	100/50 200/100	400 1000	150 400	100 250	150/100 300/200		800 600	500	800 800	500	400 800	200 400	100 200	600 600			
THRU LOSS/dB	0.25/0.45	0.15	0.15	0.25	0.3/0.4		0.3	0.4	0.4	0.15	0.2	0.25	0.2	0.3	0.4	0.2	0.3
ISOL	45dB	60dB			45dB		40-50dB			60dB			55dB			50dB	
VSWR	1.2:1	1.2:1			1.2:1		1.2:1			1.2:1			1.2:1			1.2:1	
CONNECTOR COMPLEMENT	<div><div>N</div><div>MIX</div><div>430 1200</div><div>M N</div></div>	<div><div>M</div><div>MIX</div><div>144 430</div><div>M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430</div><div>M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430</div><div>M N</div></div>	<div><div>M</div><div>MIX</div><div>144 220</div><div>M M</div></div>	<div><div>M</div><div>MIX</div><div>144 220</div><div>M M</div></div>	<div><div>M</div><div>MIX</div><div>144 220 430</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 220 430</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>50 144 430</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>50 144 430</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430 1200</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430 1200</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430 1200</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430 1200</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430 1200</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430 1200</div><div>M M M</div></div>	<div><div>M</div><div>MIX</div><div>144 430 1200</div><div>M M M</div></div>
CONNECTOR	12" Cable w/ Connectors	Direct	12" Cable w/Connectors		12" Cable w/Connectors	Direct	12" Cable w/Connectors		Direct	12" Cable w/Connectors	Direct	12" Cable w/Connectors		Direct	12" Cable w/Connectors		

GAP: THE PERFECT ANTENNA

We at GAP realize there isn't a perfect antenna. No singular antenna will scream DX on 80 and be the best for local nets on 10. If anyone tells you there is, beware! The perfect antenna does not exist, but the right one for the low bands, then consider the Voyager. Just starting out in ham radio and need a great general coverage antenna, the Challenger is easy to assemble and for little effort will yield superior performance, especially on DX. Maybe you knowingly or unknowingly moved into one of those "restricted areas" where the Eagle's limited visibility, but unlimited ability is desired.



Eagle DX

Challenger DX

Voyager DX

This chart helps you select the right GAP antenna. When comparing GAPs, bandwidth is not a concern. With few exceptions, a GAP yields continuous coverage under 2:1 for the ENTIRE BAND.

All antennas utilize a GAP elevated asymmetric feed. A major benefit is the virtual elimination of the earth loss, so more RF radiates into the air instead of the ground. This feed is why a GAP requires **NO RADIALS**. Just as elevating a GAP offers no significant improvement to its performance, adding radials won't either, making set up a breeze.

A GAP antenna has no traps, coils or transformers. This is important. The greatest source of failure in multiband antennas are these devices. Perhaps you heard someone discuss a trap that had melted, arced or became full of water. Improvements to these inherent problems are the focus of the antenna manufacturer, while the basic design of the antenna remains unchanged. **GAP improved the trap by eliminating it!** Removing these devices means they don't have to be tuned and, more importantly, won't be detuned by the first ice or rain. The absence of these devices improves antenna reliability, stability and increases bandwidth.

Another major advantage to a GAP antenna is its NO tune feature. Screws are simply inserted into predrilled holes with a supplied nutdriver.

The secret is out and people in the know say:

CQ—"The GAP consistently outperformed base-fed antennas...and was quieter."

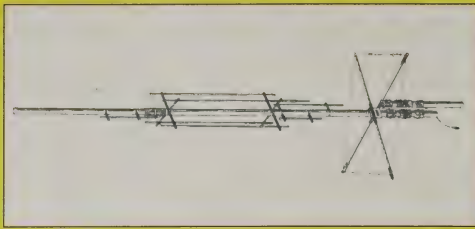
73—"This is a real DX antenna, much quieter than other verticals."

RF—"To say this antenna is effective would be a real understatement. Switching back and forth on 40m between another multiband HF vertical and the GAP, there was no comparison. Signals were always stronger on the GAP, sometimes by 5 units, not just DBs."

Worldradio—"These guys have solved the problem associated with verticals. That is, an awful lot of RF is wallowing around and dropping into the dirt instead of going outward bound. A half-wave vertical does need radials if it is end fed (at the bottom). But the same half-wave vertical does not (as much, hardly at all) if it is fed in the center."

IEEE—"Near field and power density analyses show another advantage of this antenna (asymmetric vertical dipole): it decreases the power density close to the ground, and so avoids power dissipation in the soil below it. The input impedance is very stable and almost independent of ground conductivity. This antenna can operate with high radiation efficiency in the MF AM standard broadcast band, without the classical buried ground plane, so as to yield easier installation and maintenance."

Latest Release: **TITAN DX**



This all purpose antenna is designed to operate 10m-80m. WARC bands included. It sits on a 1-1/4" pipe and can be mounted close to the ground or up on a roof. Its bandwidth and no tune feature make it an ideal antenna for the limited space environment as well as a terrific addition to the antenna farm.

MODEL	BANDS OF OPERATION											HT	WT	MOUNT	COUNTER-POISE	COST
	2m	6m	10m	12m	15m	17m	20m	30m	40m	80m	160m					
Challenger DX	■	■	■	■	■	■	■	■	■	■	■	31.5'	21 lbs	Drop In Ground Mount	3 Wires @ 25'	\$259**
Eagle DX			■	■	■	■	■	■	■	■	■	21.5'	19 lbs	1-1/4" pipe	80" Rigid	\$269**
Titan DX			■	■	■	■	■	■	■	■	■	25'	25 lbs	1-1/4" pipe	80" Rigid	\$299**
Voyager DX							■	■	■	■	■	45'	39 lbs	Hinged Base	3 Wires @ 57'	\$399**

GAP

ANTENNA PRODUCTS, INC.
99 N. Willow Street
Fellsmere, FL 32948
tel: (561)-571-9922
web: gapantenna.com

TO ORDER, CALL AES...

1-800-558-0411



VHF and UHF Fixed Station Vertical Antennas

Model G6-270R Dual-band Base Antenna for 2 Meter and 440 MHz.

Created from the same design as the G7 and G6 series. Rugged and Solid fiberglass construction. Optimum Gain and Wide Bandwidth. Consists of 5/8 λ over 5/8 λ on 2M and 4 x 5/8 λ on 440 MHz.

- Length: 7ft. 6 in.
- Weight: 5.3 lbs.
- Wind Survival: 100 mph.
- Mounting: 1-1/4" - 1-1/2" mast
- Max Power: 100 watts
- Gain: 6dBd VHF & UHF
- Bandwidth: 1.5:1 SWR
2 MHz.- 2 Meters
10 MHz.- 440 MHz.
- Feed: Shunt, DC ground
- Connector: N female



Model G6-440 Omnidirectional Fixed Station

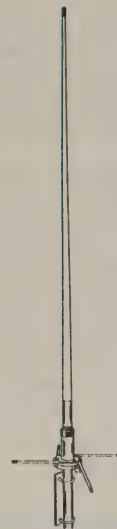
Each is pre-tuned at the factory for easy installation. Enclosed in a lightweight tapered fiberglass radome for low wind resistance. Compact size allows shipment via U.P.S. or Parcel Post.

ELECTRICAL

- Maximum power input: 250 watts
- Gain: 6 dB
- Bandwidth: 8 MHz. under 1.5:1 SWR
- Impedance: 50 ohm nominal
- Lightning protection: direct ground
- Termination: Type N female

MECHANICAL

- Length: 87"
- Weight: 5 lbs.
- Wind survival: 125 mph.
- Mounting: up to 2" mast



G6-144B Two Meter Antenna Omnidirectional Fixed Station

6dB GAIN - compared to 1/2 wave dipole.

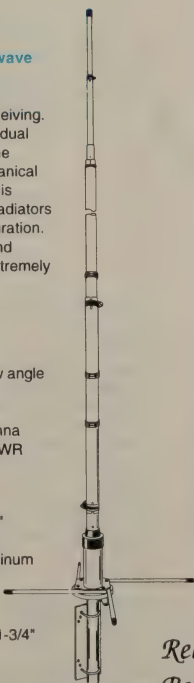
Get the tremendous advantage of 6 dB gain transmitting, 6 dB gain receiving. Whether your application is for individual fixed station or repeater operation the Hustler G6-144B has superior mechanical and electrical design. Optimum gain is achieved with two 5/8 wave-length radiators correctly phased in collinear configuration. Stated gain figure is conservative and maximum signal radiation is at an extremely low angle.

ELECTRICAL

- 6 dB gain over 1/2-wave dipole
- Omnidirectional radiation pattern
- Maximum radiation - extremely low angle
- 50 ohm feed impedance
- Field adjustable: 140-150 MHz.
- SWR at resonance: 1.2:1 at antenna
- Bandwidth: 4 MHz. under 2:1 VSWR
- Shunt-fed with D.C. grounding

MECHANICAL

- Vertical element: 117" long, 1-1/8" telescopic to 3/8"
- Constructed of high strength aluminum
- Connector: SO-239
- Wind load: 26 lbs. @ 100 mph.
- Completely self-supporting
- Mounting: Vertical support up to 1-3/4"
- Shipping wt: 6.8 lbs.



G7-144 Two Meter Antenna Omnidirectional Fixed Station

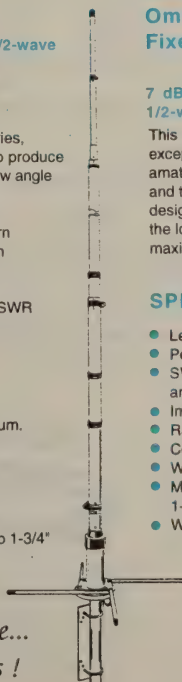
7 dB GAIN - compared to 1/2-wave dipole.

ELECTRICAL

- Radiator: Collinear shunt-fed. Triple 5/8-wave elements in series, separated by 2 phasing coils to produce maximum gain and extremely low angle of radiation.
- 7 dB gain over 1/2-wave dipole
- Omnidirectional radiation pattern
- Extremely low angle of radiation
- Tuning range: 144-148 MHz.
- VSWR: 1.2:1 at resonance
- Bandwidth: 4 MHz. under 2:1 VSWR
- Power: 600 watts
- 50 ohm feed impedance
- Shunt fed with DC grounding

MECHANICAL

- High strength fiberglass and alum.
- Completely self-supporting
- Length: 184"
- Radials: (4) 20-1/4" x 3/8" O.D.
- Connector: N-type
- Wind load: 26 lbs. @ 100mph.
- Mounting: Vertical support up to 1-3/4"
- Weight: 10 lbs.



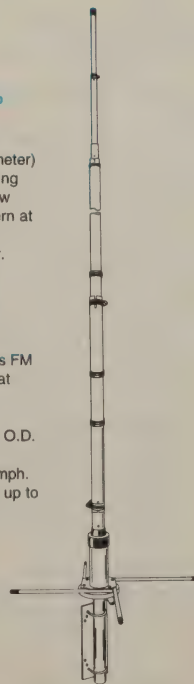
G7-220 Omnidirectional Fixed Station

7 dB GAIN - compared to 1/2-wave dipole.

This rugged antenna means exceptional 220 MHz (1-1/4 meter) amateur performance, receiving and transmitting. A unique new design keeps the signal pattern at the lowest possible angle of maximum radiation efficiency.

SPECIFICATIONS

- Length: 122" long
- Power capability: 600 watts FM
- SWR at resonance: 1.2:1 at antenna
- Impedance: 50 ohms
- Radials: (4) 14-3/4 x 3/16" O.D.
- Connector: Type N
- Wind load: 26 lbs. @ 100 mph.
- Mounting: vertical support up to 1-3/4" O.D.
- Weight: 7 lbs.



*Reliability & Performance...
Beyond your Expectations !*



VHF and UHF Mobile Antennas

Collinear

Model CGT-220

5.2 dB Gain 5/8 λ Over 1/4 λ Collinear Trunk-Lip Mount Antenna

- 1.1:1 SWR (typical) at resonance • 4 MHz. bandwidth under 1.5:1 SWR • Power rating: 200 watts FM • Height: 4' 9" including mount
- Spin knob to remove antenna
- 17' of low loss coax with connector



Model CG-220

Has identical electrical characteristics as CGT-220 but with 3/8" x 24 threaded base

Model CGT-144

5.2 dB Gain, 5/8 λ Over 1/4 λ Collinear Trunk-Lip Mount Antenna

- 6 MHz bandwidth • 1.5:1 SWR • Power rating: 200 watts FM • Length: 7' 1" including mount • 180° swivel ball for vertical positioning • 17' coax with connector • No drilling required

Model CG-144

Same as CGT-144 but has 3/8" x 24 threaded base

Stainless Steel Mounts

- Exceptional performance and quality
- 180° adjustable reinforced stainless ball
- Professional quality Cyclocal bases for greatest mechanical stability
- Exclusive "C" backup plate allows external installation
- Supplied with all mounting hardware and cork pad
- Applicable with all Hustler and other 3/8" x 24 thread antennas



SSM-1 Professional Ball Mount and Spring

SSM-2 Ball Mount

SSM-3 Stainless Steel Spring with Coupling Stud



Quick Disconnect

QD-2 100% Stainless Steel

Remove antenna from mount in seconds with push and twist release. Every part including the compression spring is manufactured from the best available 100% stainless steel. Special design of enclosed compression and lock assembly assures freedom against ice and dirt jam up. Accommodates small, medium and large size mobile antennas. Equipped with 3/8" x 24 threads, female one end and male on the other.



Professional Series Heavy Chrome

Model C-32

Hustler professional ball mount. Furnished complete with rubber pad, steel backup plate, all mounting hardware, and hex wrench.



Model C-29

Stainless steel, corrosion resistant and electropolished spring complete with 3/8" x 24 coupling stud.

Model C-30

Chrome-plated steel spring complete with 3/8" x 24 coupling stud.

RX Series

- 3.4 dB Gain; 5/8 λ, 100 watt rating
- 15 foot of coax with PL-259 connector
- Magnetic mount holds to 75 mph.

Model RX-2

2 meter, black and chrome

Model RX-220

220 MHz, black and chrome

Model RX-440



FX Series

- 3.4 dB gain; 5/8 λ, 200 watt rating
- 15 feet of coax with PL-259 connector
- Magnetic mount holds to 100 mph.

Model FX-2

2 meter, black and chrome

Model FX-220

220 MHz, black and chrome

Model FX-2B

2 meter, all black

Model FX-220B

220 MHz, all black



Unity Gain

Model THF

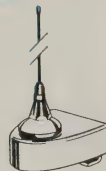
VHF/UHF Trunk-Lip Mount Antenna

Model UHT-1

VHF/UHF Roof/Deck Mount Antenna

Model UGM

VHF/UHF Magnetic Mount Antenna
Extend range of handheld or portable radios. Trimmable 17-7 PH stainless steel radiator is cut to 1/4 wavelength for low SWR and unity gain from 140 to 500 MHz. Trim chart included. Highly efficient mylar-protected magnetic mount attaches conveniently to magnetic compatible surfaces. No drilling! Supplied ready for operation with 7' of mini-coax with BNC connector.



Resonator Spring RSS-2

Finest quality stainless steel spring for use between resonator and Hustler antenna mast. This 3/4" x 3 x 1/2" spring absorbs shock when antenna strikes overhanging obstructions. Supplied ready for easy installation with 3/8" x 24 threads, female on one end, male on the other.



MBM "Super" Magnet

- 95 lb. pull strength
- Powerful 5 inch dia. magnet
- 16 feet RG 58 coax with PL-259 connector
- 3/8" x 24 female threads
- Recommended for antennas up to 48" in length

Model

BBLT-144A

3.4 dB Gain Trunk-Lip Mount Antenna

- Adjustable 143-149 MHz.
- SWR: 1.1:1 at resonance
- Power rating: 200 watts FM
- Shunt-fed • Reduced static
- Length: 4'4" inc. mt. • Spring and 180° swivel ball for vertical positioning • 17' coax with connector • No drilling required

BBL-144A

3.4 dB Gain Roof Mount Antenna

Same as BBLT-144A but mounts in 3/4" hole on a flat surface. 17' coax with connectors.



Model

SF-2

Low Cost 3.4 dB Gain

2 meter 5/8 λ for

3/8" x 24 thread mounts

- 1.2:1 SWR at resonance
- Power rating: 100 watts FM
- Tapered stainless radiator
- Length: 4'

Model

SF-220

Low Cost 3.4 dB Gain

220 MHz 5/8 λ for 3/8" x 24 thread mounts



Model

MKR-2 Radial Kit

Contains three decoupling radials and mount to convert series-fed mobile VHF antennas to fixed operation. Performance is comparable to many regular base antennas. Suitable for permanent installations or portable use. Heavy-duty zinc plated mast bracket and hardware. Accepts antennas with standard 3/8" x 24 threaded base.



Bumper Mount BM-1

Design is rugged for supporting Hustler antenna with Standard or Super resonators. Heavy stainless steel strap, stronger than chain, fits most bumpers inconspicuously. Assembly is easily installed and held rigid by "J" bolts at the top and bumper strap clamp at bottom.

Mount includes 180° adjustable swivel ball for vertical positioning of antenna. Hardware is zinc plated for superior resistance against corrosion.



Multi-band Adapter VP-1

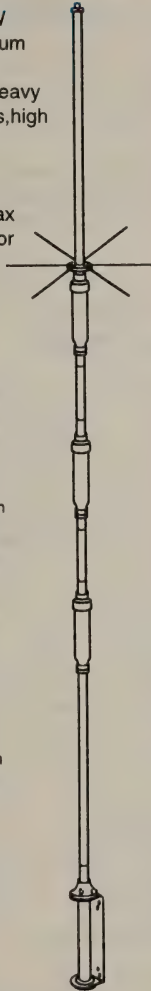
Automatic bandswitching using any three Hustler H.F. mobile resonators. Adapts with any Hustler H.F. mast (MO-1, MO-2, MO-3, MO-4) for tri-band operation easily and quickly.





Fixed Station Multi-Band HF Vertical Antennas

- Broadbanded - low VSWR at band edges
- Power capability - full legal limit on SSB or CW
- Solid one-inch fiberglass trap forms for optimum electrical and mechanical stability
- Heavy wall, high strength aluminum tubing, heavy duty aluminum mounting bracket and low loss, high strength insulators
- Stainless steel clamps and hardware
- Easy assembly and tuning
- Single line feed with any length of 50 ohm coax
- Use as ground mount with or without radials, or elevated mount with radials



Model 6-BTV

- Bands** 10-15-20-30-40 & 75 or 80 meters
Length/weight 24'16.5 lbs.
Mounting Vertical support up to 1-3/4" O.D.
Wind load 29 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR at resonance 1.15 to 1 or better
Bandwidth VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. on 75 or 80 meters)

Model 5-BTV

- Bands** 10-15-20-40 & 75 or 80 meters
Length/weight 25'1" /17 lbs.
Mounting Vertical support up to 1-3/4" O.D.
Wind load 29 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR at resonance 1.15 to 1 or better
Bandwidth VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. on 75 or 80 Meters)

Model 4-BTV

- Bands** 10-15-20-40 meters
Length/weight 21'5"/15 lbs.
Mounting Vertical support up to 1-3/4" O.D.
Power capability Full legal limit SSB/CW
VSWR at resonance 1.15 to 1 or better
Bandwidth VSWR 1.6:1 at band edges

30 Meter Add-on Kit for 4-BTV and 5-BTV

- Model 30-MTK**
 Full 30 meter band coverage
 Will not affect normal operation
 Easy installation
 All hardware included
 Weight: 5 lbs.



Hustler Resonators

Standard Resonators

Power rating - 400 watts SSB

Part	Description	Approx. Bandwidth 2:1 SWR or Better
RM-10	10 METER	150-250 KHz.
RM-11	11 METER	150-250 KHz.
RM-12	12 METER	90-120 KHz.
RM-15	15 METER	100-150 KHz.
RM-17	17 METER	150 KHz.
RM-20	20 METER	80-100 KHz.
RM-30	30 METER	50-60 KHz.
RM-40	40 METER	40-50 KHz.
RM-75	75 METER	25-30 KHz.
RM-80	80 METER	25-30 KHz.

Super Resonators

Power rating - full legal limit. Super Resonators also offer wider bandwidth, especially on 40, 75 and 80 meters.

Part	Description	Approx. Bandwidth 2:1 SWR or Better
RM-10-S	10 METER	250-400 KHz.
RM-11-S	11 METER	250-400 KHz.
RM-15-S	15 METER	150-200 KHz.
RM-20-S	20 METER	100-150 KHz.
RM-40-S	40 METER	50-80 KHz.
RM-75-S	75 METER	50-60 KHz.
RM-80-S	80 METER	50-60 KHz.



Mobile HF Antennas

Hustler Masts



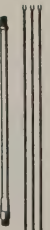
MO-1 Mobile mast, 54" high, for deck or fender mounting - folds over 15" above base.

MO-2 Mobile mast, 54" high, for bumper mounting - folds over 27" above base.

MO-3 Mobile mast, 54" high, solid - does not fold over.

MO-4 HF Mobile Mast

- For use with Hustler HF resonators
- Only 22" long
- Suitable for trunk or deck mounting
- Includes 3 new tip rods



MO-4

*Reliability & Performance...
Beyond Your Expectations!*

TRIBANDERS

The KT-34A and KT-34XA have become pace-setters for tribander performance. The four element KT-34A offers an unusually compact solution for a three-band high performance installation. The six element KT-34XA has been designed to outperform all commercially available tribanders and many monobanders as well. The high performance of these tribanders results from their innovative construction. Traps, coils, and capacitors found on conventional tribanders are replaced by lossless linear loading and high-Q air capacitors constructed of aluminum tubing. These techniques coupled with KLM's unique dual-driven element system allow broadband performance with high gain and low VSWR remaining nearly constant across the three bands. The KT-34A can be upgraded to the KT-34XA at any time.

The boom length of the KT-34XA is doubled, when one tri-resonant and one full size 10 meter element is added. These changes increase the gain to 11-11.3 dBd on 10M, 9-9.5 dBd on 15M, and 8.5-9 dBd on 20M.

Structurally, the KT-34A is built tough. All the aluminum, including the boom, is strong weather resistant 6063-T832 alloy. All the hardware is stainless steel except for the mounting U-bolts. Virtually indestructible Lexan insulators support the elements and insulate them from the boom. Rotation is possible by most any ham rotor. Wind balance and wind survival are excellent.

KT-34A



KT-34XA



SPECIFICATIONS

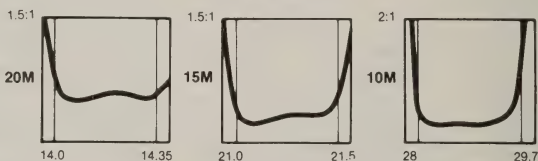
ELECTRICAL

BANDWIDTH 14.0-14.350 MHz
21.0-21.450 MHz
28-29.7 MHz
GAIN 7 dBd \pm 0.3 dB
VSWR 1.5:1
F/B-F/S 20 dB/30 dB
FEED IMP 50 Ohms w/Balun
BALUN 4:1, 5 kW PEP

MECHANICAL

ELEMENT LENGTH 24 ft.
BOOM LENGTH 16 ft.
TURN RADIUS 16 ft.
WINDLOAD 6 sq. ft.
WEIGHT 45 lbs.
MAST 2 in. O.D.

KT34A vs. SWR



SPECIFICATIONS

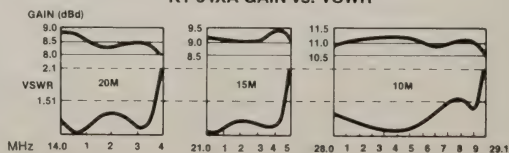
ELECTRICAL

BANDWIDTH 14.0-14.350 MHz
21.0-21.450 MHz
28-29.1 MHz
GAIN 8.5-9 dB
9-9.5 dB
11-11.3 dB
VSWR 1.5:1
F/B-F/S 20 dB/40 dB
FEED IMP 50 Ohms w/Balun
BALUN 4:1, 5 kW PEP

MECHANICAL

ELEMENT LENGTH 24 ft.
BOOM LENGTH 32 ft.
TURN RADIUS 21.5 ft.
WINDLOAD 9 sq. ft.
WEIGHT 68 lbs.
MAST 2 in. O.D.

KT-34XA GAIN vs. VSWR



VHF/UHF ANTENNAS

2 METER YAGIS

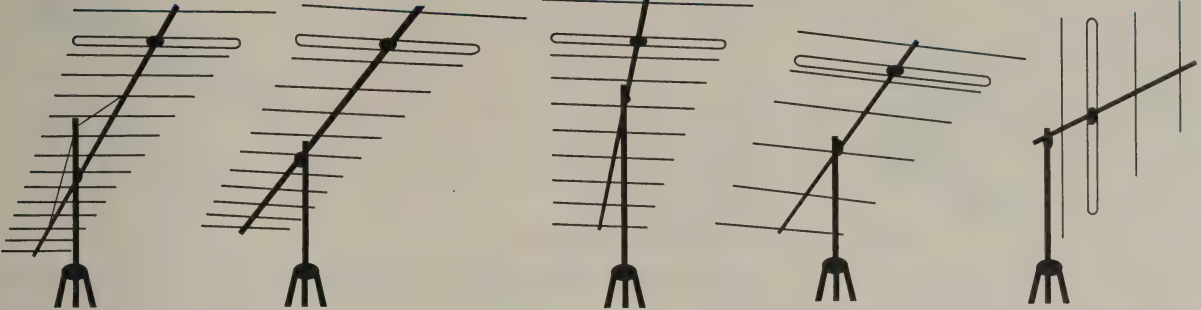
2M-15X

2M-12X

2M-10X

2M-7X

2M-4X



2 METERS

2M-20 LBX

2M-15X
new for '96

2M-12X
new for '96

2M-10 X
new for '96

2M-7X
new for '96

2M-4 X

ELECTRICAL:

BANDWIDTH	SPEC. 144-146 USABLE 143-148 144-15.5 dBd	144-148 MHz	144-148 MHz	144-148 MHz	144-148 MHz	144-148 MHz
GAIN	145-15.5 dBd 146-15.4 dBd 147-15.3 dBd 148-13.7 dB	14.8 dBd	13.4 dBd	12.5 dBd	10.3 dBd	8.5 dBd
VSWR.....Less than	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
F/B.....Greater than	30 dB	30 dB	25 dB	25 dB	25 dB	20 dB
BEAMWIDTH.....	E=26°, H=28°	E=26°, H=29°	E=26°, H=33°	E=32°, H=36°	E=46°, H=50°	62°
FEED IMP	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
BALUN	4:1, 2 kW Coax	4:1, 2 kW Coax	4:1, 2 kW Coax	4:1, 2 kW Coax	4:1 2 kW Coax	4:1, 2 kW Coax

MECHANICAL:

ELEMENT LENGTH	40 5/8 in.	40 5/8 in.	40 5/8 in.	40 5/8 in.	40 5/8 in.	40 5/8 in.
BOOM LENGTH	38.5 ft.	28 ft.	21 ft.	15 ft.	8 ft. 9 in.	4.2 ft.
TURN RADIUS	21 ft. 10 in.	15 ft. 5 in.	13 ft.	8 ft. 9 in.	5 ft.	4 ft.
WINDLOAD	2.19 sq. ft.	1.75 sq. ft.	1.6 sq. ft.	1.38 sq. ft.	.65 sq. ft.	.25 sq. ft.
WEIGHT	17 lbs.	11 lbs.	9 lbs.	6 lbs.	4 lbs.	2 lbs.
MAST	2 in.	1 1/2 in. or 2 in.	1 1/2 in. or 2 in.	1 1/2 in. or 2 in.	1 1/2 in. or 2 in.	1 1/2 in. max.

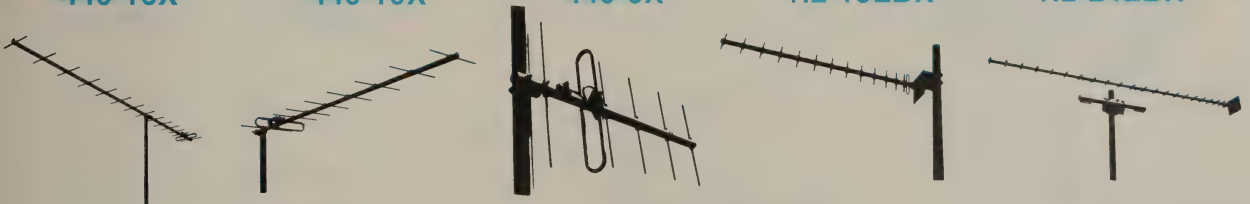
440-16X

440-10X

440-6X

1.2-15LBX

1.2-24LBX



440 MHz

432 MHz

1296 MHz

440-16X

440-10X

440-6X

432-30 LBX

432-20 LBX

1.2-44 LBX

1.2-24 LBX

1.2-15 LBX

ELECTRICAL:

BANDWIDTH	420-450 MHz	420-470 MHz	420-470 MHz	430-440 MHz	425-440 MHz	1260-1300 MHz	1260-1300 MHz	1260-1300 MHz
GAIN	14.0 dBd	11.5 dBd	8.9 dBd	17.3 dBd	15.3 dBd	18.2 dBd	16.2 dBd	13.6 dBd
VSWR.....Less than	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
F/B.....Greater than	20 dB	20 dB	20 dB	20 dB	20 dB	39 dB	39 dB	39 dB
FEED IMPEDANCE	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
BALUN	Coax "N" 4:1, 2 kW	Coax "N" 4:1, 2 kW	Coax "N" 4:1, 2 kW	1:1 Sleeve, 2 kW	1:1 Sleeve, 2 kW	4:1 Rigid Coax	4:1 Rigid Coax	4:1 Rigid Coax
BEAMWIDTH	E=28°, H=32°	48°	60°			E=16°, H=18°	E=22°, H=24°	E=28°, H=30°

MECHANICAL:

ELEMENT LENGTH	14 in. max.	14 in. max.	14 in. max.	14 in. max.	14 in. max.	4.5 in.	4.5 in.	4.5 in.
BOOM LENGTH	10 ft. 3 in.	4.75 ft.	28 in.	21 ft. 11 in. (9.6 wavelength)	12 ft. 4 in. (5.42 wavelength)	12 ft. 4 in.	75 3/4 in.	42 in.
TURN RADIUS	6 ft.	4.90 ft.	2 ft. 5 in.	12 ft. 4 in.	7 ft.	84 in.	38 in.	43 in.
WINDLOAD	0.74 sq. ft.	0.53 sq. ft.	0.2 sq. ft.	1.72 sq. ft.	0.9 sq. ft.	1 sq. ft.	1/2 sq. ft.	1/4 sq. ft.
WEIGHT	7.5 lbs.	4 lbs.	1.2 lbs.	9 lbs.	5 lbs.	10 lbs.	7 lbs.	4 lbs.
MAST	1 1/2 in.	1 1/2 in.	1/12 in.	2 1/8 in. max.	1 1/2 in.	2 in. O.D.	up to 2 in. O.D.	up to 2 in. O.D.
MOUNT	Center	Rear	Rear	Center	Center	Center	Center	Rear

SATELLITE CIRCULARS — VHF/UHF

ELECTRICAL:

	2M-14C	2M-22C	435-18C	435-40CX
BANDWIDTH	144-150 MHz	144-150 MHz	420-450 MHz	420-450 MHz
GAIN	11 dBc	13 dBc	12 dBc	15.2 dBc
VSWR	Less than 1.5:1	1.5:1	1.5:1	1.5:1
F/B	Greater than 20 dB	20 dB	20 dB	20 dB
FEED IMP	50 Ohms	50 Ohms	50 Ohms	50 Ohms
BEAMWIDTH	38°	34°	34°	25°
ELLIPTICITY	3 dB max	3 dB max	3 dB max	3 dB max
BALUN	(2) 4:1 coax, 2 kW*	(2) 4:1 Coax, 2 kW*	(2) 4:1 Coax, 2 kW*	(2) 4:1 Coax, 2 kW*

MECHANICAL:

ELEMENT LENGTH	40.625 in. max	40.625 in. max	13.25 in. max	13.625 in. max
BOOM LENGTH	12 ft. 9 in.	19 ft. 1 in.	7 ft. 4 in.	14 ft. 7 in.
TURN RADIUS	7 ft.	11 ft.	7 ft.	8 ft., 9 in.
WINDLOAD	1.25 sq. ft.	1.85 sq. ft.	0.5 sq. ft.	1.16 sq. ft.
WEIGHT	7.5 lbs.	11 lbs.	4.5 lbs.	10 lbs.
MAST	2 in.	2 in.	1.5 in.	1.5 in.
MOUNT	Center	Center	Rear	Center
POLARITY	Circular R.H. and L.H. switchable using CS-3Circular R.H. and L.H. switchable using CS-2			

*Derate to 250W when using Switchers (supplied)



435-40CX

HF LOG PERIODICS

KLM's Log Periodic Antennas offer extended coverage of the amateur bands and intermediate frequencies. The **10-30-7LPA** for example, covers 20, 15, and 10 Meters plus the WARC bands and many MARS frequencies. The addition of the **40M-1** dipole module provides 40 Meter operation as well. This can easily be accomplished using the **SK-8** Conversion Kit. This system is also available complete as the **7.2/10-30-LPA**. All HF Log Periodic Antennas are available with a Heavy Duty Boom at additional cost. Also, 10kW Baluns are available for a nominal charge.

ELECTRICAL:

	10-30-7LPA	7.2/10-30LPA	6-30-15LPA
BANDWIDTH	10-30 MHz	7.2/10-30 MHz	6-30 MHz
GAIN	7 dBd typ	3/7 dBd typ	5.5 to 8 dBd
VSWR	1.5:1 typ	1.5:1 typ	2:1 and less, typ
F/B	15 dB	10/15 dB	15 dB typ
FEED IMP	50 Ohms, unbal.	50 Ohms, unbal.	50 Ohms, unbal.
BALUN(S)	4:1, 5 kW	4:1, 5 kW	(3) 4:1, 4 kW PEP

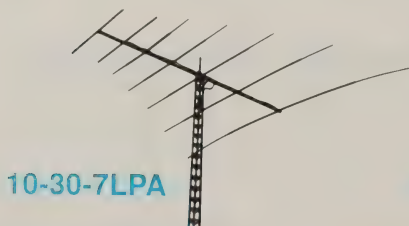
MECHANICAL:

ELEMENTS	7	8	1.5
ELEMENT LENGTH	43 ft.	46 ft.	48 ft.
BOOM LENGTH	30 ft.	42 ft.	46 ft. (6-12-8)
TURN RADIUS	26 ft.	32 ft.	30 ft. (10-30-7)
WINDLOAD	8.25 sq. ft.	12 sq. ft.	24 sq. ft.
WEIGHT	70 lbs.	100 lbs.	150 lbs. (6-12-8) / 70 lbs. (10-30-7)
MAST	2 in.	2 in.	2 in./3 in.

SK-8 Conversion Kit

This kit enables you to add 40 Meters to your **KLM** 10-30-7LPA antenna. The **SK8** kit includes a boom extension, a beta match for the dipole and all the necessary hardware including a full set of instructions. Purchase a **KLM** 40M Dipole to finish the upgrade.

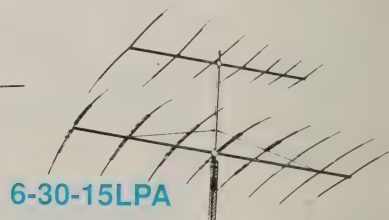
By upgrading your present 10-30-7LPA to include 40M you will enjoy increased Front-to-Back on 20M and will see Front-to-Back gain on 40M similar to a 2 element beam. You will also enjoy forward gain on 40 Meters through the interaction of the full log array. It's an easy way to upgrade your log.



10-30-7LPA



7.2/10-30LPA



6-30-15LPA

6 METER BEAM ANTENNAS

Model	Band Width	Gain	VSWR	F/B	Feed Imp (unbal.)	Balun	E Beamwidth	H Beamwidth	Element Length	Element Dia.	Boom Length	Boom Dia.	Turn Radius	Wind Load	Wt.	Mast
6M-5	50-52 MHz	9.7dBd	1.5:1	30db	50Ω	4:1, 5kW			57.75'		11.75'		7.5'	1.7 sq.ft.	9 lbs	2"
6M-7LD	50-51 MHz	10.5dBd	1.5:1	30db	50Ω	4:1, 5kW			61"	.375"	20'	1.5"	13'	2.5 sq.ft.	12 lbs	2"
6M-7LB	50-52 MHz	11.5dBd	1.5:1 (50-51 MHz)	30db	50Ω	4:1, 5kW			61"	.5"	25.75'	2"	16'	3 sq.ft.	22 lbs	2"
6M-10	50-52 MHz	11.7dBd	1.5:1	26db			40°	45°	.5" O.D.		2' O.D. x 34' 5"		19', 6"	4.4 sq.ft.	29 lbs	2"
6M-14	50-52 MHz	14dBd	1.5:1	26dB			33°	36°	.5" O.D.		3' O.D. x 61'		34'	10 sq.ft.	73 lbs	2 3/4"

pro-am[®] by Valor[®]

"The Clear Connection"™

Mounts and Accessories

160-6 Meters Mobile

PHF Series Antennas

Pro-Am's Monoband PHF Series consists of a black fiber-glass lower section with integral coil and an adjustable (and removable) stainless steel whip (except for PHF160). These time-proven HF antennas are especially designed for maximum efficiency, low SWR, and broad bandwidth. They are power rated at 250 Watts P.E.P. and built to withstand considerable use. Standard 3/8 x 24 threads. Total assembled length on all models: 96". (Exception: PHF6: 58")

Model	Band	Band Width
PHF160	160 Meters	12 KHz
PHF75	75 Meters	36 KHz
PHF40	40 Meters	60 KHz
PHF30	30 Meters	100 KHz
PHF20	20 Meters	150 KHz
PHF17	17 Meters	175 KHz
PHF15	15 Meters	200 KHz
PHF12	12 Meters	300 KHz
PHF10	10 Meters	500 KHz
PHF6	6 Meters	1000 KHz

Micro-Mag™ 2 Meter and 70CM

MM270B

Dual Band MICRO-MAG™ Kit with 9' of RG174 Cable to BNC Connector. 1/4 Wave at 2m and 5/8 Wave at 70cm. Typical VSWR: Less than 1.5:1 through the band. Max. Power: 50 Watts on 2m and 25 Watts on 70CM.

Through-Glass 2 Meter and 70CM

GM270

Dual Band Through-The-Glass Antenna Kit featuring a 26" Copper Plated Whip with Black Finish and 14' of RG58 Cable to PL-259 Connector. Gain: 2.6dB over 1/4 wave at 2m & 4.0dB over 1/4 wave at 70cm. Typical VSWR: Less Than 2.0:1 through the bands. Max. Power: 50 Watts. Field Tuneable.

Through Glass 2 Meter

GM144

2M Through-The-Glass Antenna Kit featuring a 27-1/2" Copper Plated Whip with Black Finish and 14' of RG58 Cable to PL-259 Connector. Gain: 2.5dB over 1/4 wave. VSWR: 1.5:1 through the band. Max. Power: 50 Watts. Field Tuneable.

(NOTE: Some newer automobiles are equipped with "passivated glass" which does not permit on-glass antennas to work properly. Please check your owner's manual or your dealer.)

Hand-Held Antennas

144BNC

Electrical 1/4 Wave "Rubber Duck" with high performance in the VHF range of 144-148 MHz. 12" in length. Provided with BNC connector for quick disconnect.

450BNC

Full 1/4 Wave "Rubber Duck" with high performance in the UHF range of 430-470 MHz. 6-1/2" in length. Comes with BNC connector for quick disconnect.

Mag Mount Kit

VAA002

2 Meter Mag Mount Kit. 17-7 ph Stainless Steel Whip, 12' of Cable with PL-259 Connector. Can be cut for 220 or 450 MHz. Available in Chrome or Black Finish. (Please specify "B" after Model Number for Black)

VAA002BN

Same as VAA002 but with BNC Connector.

Dual Band Antenna

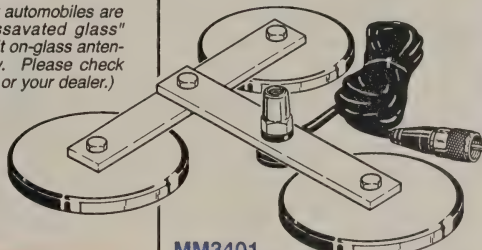
MO144-440

Dual Band Antenna to Cover it All! 19" Stainless Steel Whip. 1-1/8" Threads Match Pro-Am's Mounts and 3/4" Hole Motorola TAD/TAE Mounts. Great for all band scanners 25 MHz - 1.3 GHz. SWR: Less than 2:1. Gain: Unity on 2m and 2.1dB over 1/4 Wave on 70CM. Power FM: 150 Watts.



PAT2

Low Profile Trunk Mount includes 17' of RG58 Cable with PL-259 Connector. (Available in Black Finish: specify with a "B" suffix.)



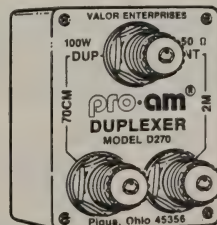
MM3401

Maxi-Magnet Mount Kit features three 5" (401) magnets properly spaced on a heavy duty aluminum frame. The MM3401 is pre-wired to Valor's patented wafer termination with 17' of RG58 coax and PL-259 connector. Accepts standard 3/8" x 24 antennas. Available with Black magnet cups: MM3401B.



PAM

3-3/4" Diameter Low Profile Magnet Mount Kit pre-wired with 12' of RG58 Cable to PL-259 Connector. (Available in Black or Chrome Plated; Add "B" suffix for Black)



D270

Duplexer for 2-Band Antennas. Provides cross-band operation with a 2m/70cm antenna. Power rated up to 100 Watts with 50 Ohm impedance. Size: 2.25" x 3" x 1".

Multi-Band Antenna System

AB5

Pro-Am's AB5 System consists of a 4' aluminum mast and tri-top adaptor with resonators for 10, 15, 20 40, and 75 meters. Mast fits any standard 3/8 x 24 thread mount. The 10, 15, and 20 meter resonators cover SSB ranges without extra tuning. The interchangeable 40 and 75 meter resonators are easily tunable.

VHF Antenna

PHB144

2M, 3dB Gain VHF Antenna featuring a matching Low Loss Coil and moto style threads. VSWR: 1.5:1. Power: 100 Watts.

Dual Band Series

Larsen dual band antennas provide excellent performance for simultaneous use of VHF and UHF amateur frequencies. Each Larsen dual band antenna is factory preset to guarantee optimum performance with no tuning required.

NMO-2/70-SH\$33.95

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: NMOUHFBASEB w/spring
Height: 17"
Whip: WNMO2/70SH
Lower profile amateur 2m/70cm dual band antenna with spring for NMO mounts.

NMO-2/70B\$54.95

Freq: 144-148/440-450 MHz
Gain: 2.4/4dB
Power: 100 Watts
Type: VHF: 5/8 Wave
UHF: Collinear
Base: NMO2/70BCO
Height: 33.5"
Whip: W2/70B
Amateur 2m/70cm dual band antenna for NMO mounts. Available in black and chrome.

MM-2/70\$42.95

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: 3" Round Mag Mount
Height: 17"
Whip: WNMO2/70B
Complete 2m/70cm magnetic mounting antenna with 12' of RG58A/U coax.

KD4-2/70\$28.95

Freq: 144-148/442-448 MHz
Gain: Unity
Power: 25 Watts
Type: VHF: Loaded 1/4 Wave
UHF: 1/4 Wave
Conn: BNC
Height: 8"
Impedance matching transformer provides high Q and deeper resonance.

KG-2/70-CX-PL\$95.95

Freq: 144-148/442-448 MHz
Gain: 2.4/4.5dB*
Power: 50 Watts
Type: VHF: 1/2 Wave
UHF: Collinear
Base: KG2/700/S
Height: 32.5"
*Ground plane required for gain
Glass mount dual band antenna for 2m/70cm amateur radio frequencies.

NMOQ-2/70-B\$31.95

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: NMOUHFBASEB
Height: 18"
Whip: WNMOQ2/70B

NMO-2/70C\$50.95

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: 5/8 Wave
UHF: Collinear
Base: NMO2/70BCO
Height: 36.75"
Whip: W2/70

Amateur 2m/70cm dual band antenna for NMO mounts. Available in black and chrome.

Kulglass Series

Larsen's Kulglass™ (KG) series uses a patented low impedance design and advanced materials to produce the world's best on-glass antenna. The KG uses advanced resin polymer plastic to completely enclose the circuit board or loading coil for mechanical durability and weather resistance. 3M's best adhesive tape, plus Larsen's unique bonding enhancer ensure the best possible grip to the glass.

KG-144-UD-PL\$70.95

Freq: 144-160 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG1440/S
Conn: PL-259
Height: 48"
Whip: WKG144
Complete KG glass mount antenna.

KG-220-UD-PL\$70.95

Freq: 220-225 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG2200/S
Conn: PL-259
Height: 26.5"
Whip: WKG220
Complete KG glass mount antenna.

KG-440-UD-PL\$58.95

Freq: 440-460 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG4400/S
Conn: PL-259
Height: 15"
Whip: WKG440
Complete KG UHF glass mount antenna with coax and connector.

Kulduckie Portable Series

Superior transmit range and tough mechanical durability are the hallmark of Larsen portables. All center cores are made of brass or copper plated steel to maximize RF emission. Fully soldered connections and silver-plated components improve electrical efficiency. Double spring BNC's also reduce wear on the mount. Other mounting styles available.

KD4-146\$17.95

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/4 Wave Helical
Conn: BNC
Height: 8"

KD4-146-HQ (2m)\$22.95

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/4 Wave Helical
Conn: BNC
Height: 8"

KD-14-2M-HW\$34.95

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/2 Wave Telescoping
Conn: BNC
Height: 8.5 to 42"
Whip: WKD142MHW

NMO Mobile Antennas

Larsen's own version of the standard 3/4" Motorola TAD/TAE type mount uses advanced design, materials and construction to provide a premium mount. For demanding outdoor applications, the chemical resistant NMO series is housed in a resin polymer plastic shell which is completely molded around the nickel plated brass whip stud to eliminate moisture damage. Our superseal gasket also greatly reduces water intrusion under the base.

NMO-27C\$33.95

Freq: 27-31 MHz
Gain: Unity
Power: 200 Watts
Type: Loaded 1/4 Wave
Base: NMO27BCO
Height: 53"
Whip: W490

NMOQ-SPEC\$9.95

Freq: 136-512 MHz
Gain: Unity
Power: 200 Watts
Type: 1/4 Wave
Height: 21"

Hear The Difference

NMO-150C\$30.95

Freq: 144-174 MHz
Gain: 3dBd
Power: 200 Watts
Type: 5/8 Wave
Base: NMO150BCO
Height: 51.75"
Whip: W490

NMO-220C\$30.95

Freq: 220-225 MHz
Gain: Unity
Power: 200 Watts
Type: 5/8 Wave
Base: NMO220BCO
Height: 34.5"
Whip: W400

NMO-440C\$29.95

Freq: 440-460 MHz
Gain: 4.5dBd
Power: 200 Watts
Type: 5/8 over 1/2 Wave
Base: NMOUHFBASEB
Height: 33"
Whip: W154



Base Station Antennas

Larsen manufactures a variety of small base station for directional and omni-directional applications. Each base station antenna is designed with premium materials to withstand the most demanding weather conditions. All base station antennas come with mounting hardware to attach to a pole up to 2" in diameter.



BSA-K\$46.95

Freq: 144-512 MHz
VSWR: 1.5:1 or less
Power: 200 Watts
Conn: UHF Female
Whip: 51-3/4"

Complete base station kit for designing a base station unit from 144-512 MHz. Comes with mounting hardware.

FB1-136\$129.95

Freq: 136-230 MHz
Gain: 3.6dB
Power: 200 Watts
Type: 5/8 over 1/2 Wave
Height: 96"
Height: 33"
Wind Load: 100 mph



Mounts

Larsen has a full line of permanent and temporary mounts to solve nearly every installation problem. Each mount is manufactured of the highest quality materials, including premium coax.

NMO-K\$13.95

Motorola style roof mount

Size: 3/4"
Coax: 17' RG-58A/U
Conn: PL-259



NMO-MM\$29.95

Motorola style magnetic mount

Size: 3-1/2" x 3"
Rectangle
Coax: 12' RG-58A/U
Conn: 58FCP
Pull Strength: 90 lbs.



NMO-TLP\$26.95

Motorola style trunk gutter bracket, black

Size: 1-3/4" x 1-3/4"
Coax: 17' RG-58A/U
Conn: PL-259



PO-K\$25.95

S0-239 female type roof mount

Size: 3/4" hole
Coax: 17' RG-58A/U
Conn: PL-259



PO-MM\$31.95

S0-239 female type magnetic mount

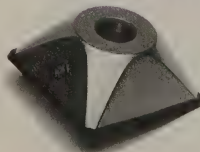
Size: 3-1/2" x 3"
Rectangle
Coax: 17' RG-58A/U
Conn: 58FCP
Pull Strength: 90 lbs.



PO-TLM\$27.95

Chrome S0-239 female type trunk lip mount w/coax & connector.

Size: 2-1/2" x 2-1/2"
Mount: trunk lip w/set screws.



TMB-34\$4.95

TMB-34B (black) \$6.95
Chrome trunk mounting bracket for NMO antenna.

Size: 1-5/8" x 1-5/8"
Mount: NMO

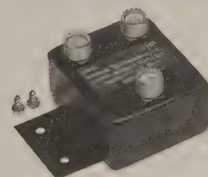


Parts and Accessories

AD2/70\$75.95

Type: S0-239 all ports

Dual Band antenna coupler/duplexer.



W-154SPECIAL - LIMITED QUANTITY \$4.95

Chrome collinear replacement whip with enclosed coil for 440 MHz. (33")

W-490\$9.95

Chrome .100 tapered replacement whip for 144 MHz. (51-1/2")

W-490B\$12.95

Black .100 tapered replacement whip for 144 MHz. (51-1/2")



Larsen Electronics, Inc.

3611 NE 112th Avenue

Vancouver, WA 98682

360 944-7551, Fax: 360 944-7556

Email: larsen@larsenet.com

Canadian Larsen Electronics, Ltd.

5049 Still Creek Avenue

Burnaby, BC V5C 5V1

604 299-8517, Fax: 604 299-4191



BARKER & WILLIAMSON ANTENNAS and ACCESSORIES

603 Cidco Rd • Cocoa FL 32926

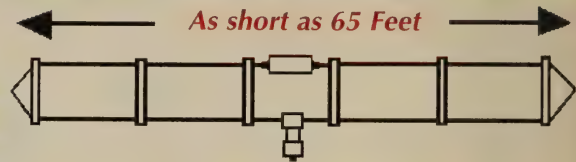
Tel: 407-639-1510 • Fax: 407-639-2545

For more information, please visit our website at www.bwantennas.com

Broadband Folded Dipoles - Continuous Coverage of HF Band

These antennas are so unique that they even have a patent on them! They can offer operation over the entire HF band without need for an antenna tuner. Work any frequency you want without going through a lot of knob twirling and measurements to get a good SWR match - just set your frequency and go!

See B&W in the Price List



- ✓ Unique Patented Design
- ✓ True Continuous Coverage
- ✓ 1.8 - 30 Mhz in Only 90 Ft.
- ✓ Low Noise for Superior Receive

- SWR less than 2:1 from 1.8 - 30 Mhz
- No antenna tuner required
- 2 KW PEP SSB/CW ICAS
- #14 stranded copperweld or stainless wire
- 50 Ohm input with SO-239
- Comes completely assembled, only 10 lbs.
- Install as flat, inverted Vee, or sloper

This antenna was designed at Barker & Williamson by request of the US Government over 20 years ago. Since then we have supplied tens of thousands of them to the US Armed Forces and other military organizations including Nato, international disaster relief organizations, emergency management operations and countless commercial organizations around the world. They can be found on every continent, including Antarctica. From deserts, to tropical rain forests, to frozen tundra - tough antennas that deserve their excellent reputation for performance worldwide.

AC-5-30 (Copperweld), ACS-5-30 (Stainless Steel) -----5.0 to 30 MHz in 65 feet

BWD-1.8-30 (Copperweld), BWDS-1.8-30 (Stainless Steel) -----1.8 to 30 MHz in 90 feet

ASW-90 (Copperweld) Receive Only -----500 kHz to 30 MHz in 90 feet

Trap Dipole Antenna Kits

Barker & Williamson dipoles are made from #14 stranded copperweld wire. All antennas will handle 1KW PEP. These dipoles may be installed as inverted "Vees" or horizontally.

Length	Bands	Description	Model	Shpg Weight
137 Ft 41.75 M	160 80 40 20	Low SWR on all bands. Three sets of traps isolate a full half wave on each band for superior performance.	AS-160	8 lbs 3.65 Kg
110 Ft 33.5 M	80 40 20 15 10	Low SWR on 80 and 40 meter bands, somewhat higher SWR on 20, 15 and 10 meters. Utilizes one set of traps.	AT-110	5 lbs 2.25 Kg
96 Ft 29.25 M	160 30	2 KW PEP. This antenna has one set of loading coils to allow 160 meters in very limited space.	AXS-160	6 lbs 2.72 Kg
78 Ft 23.75 M	80 40 20	Two sets of traps give low SWR on all bands. Excellent 80 meter coverage.	AS-80	6 lbs 2.72 Kg
65 Ft 19.8 M	80 40 15	A combination of one set of loading coils and one set of traps allows 80 meters in very limited space.	AXS-80	6 lbs 2.72 Kg
55 Ft 16.75 M	40 20 15 10	Four bands in only 55 ft. One set of traps gives efficient operation.	AT-55	5 lbs 2.25 Kg
40 Ft 12.2 M	40 20 15 10	Utilizing three sets of traps, this antenna has low SWR on all bands.	AS-40	7 lbs 3.18 Kg
20 Ft 6.1 M	20 15 10	For very light spots, two sets of traps yield low SWR on all three bands.	AS-20	6 lbs 2.72 Kg

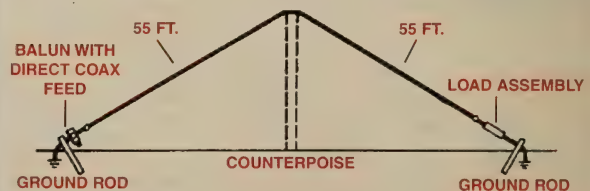
300W PORTABLE ANTENNA 2 TO 40 METERS



AP-10 Designed especially for renters, travelers and city dwellers. Aluminum bracket clamps to a window or table. Includes detachable whip (51"), insulated counterpoise wire, 10 ft. of coax, hardware and set of 5 loading coils for 40, 30, 20, 15 and 10 meters. Use nearest coil and adjust counterpoise for in between bands. No coils needed for 6 or 2 meters. Also useful as an emergency antenna. Don't be off the air! Requires simple assembly. 3 lbs.

End-Fed Vee - Broadband from 1.8 to 30MHz

All of the same unique broadband characteristics of our folded dipole antennas, except in a different configuration. Weight 7 lbs.



AC-1.8-30 -----Copperweld Wire

ACS-1.8-30 -----Stainless Steel Wire

Quality Communications Products Since 1932 — All Products Proudly Made in the USA



10M Base Antenna with Twin Ring Adjust-A-Match Tuning

The **A-99** is a voltage fed half wave variable mutual transfer inductance tuned antenna for 10 meters.

It's economical and easy to use! — the **SOLARCON** sealed base unit is tuned with external inductance rings. Impedance remains constant over the tuning range.

Simple Tuning! — raising the tuning rings raises the frequency and lowering the rings lowers the resonant frequency.

A real beauty! — rugged three-piece white fiberglass construction with triple plated brass fittings. It's easy to assemble and install.

The optional **GPB-1** Ground Plane Radial Kit makes it perform even better!

Specifications:

Height	17 ft. 8 in.	Radiation Angle.....	<20°
Sections	3	Grounding	DC Ground
Band	10 meters	Mounting	1-1/2" mast
Gain	3 dBi	Coaxial Cable	52Ω
Power Limit	2000W	Connector	SO-239

A-99 Price: \$64⁹⁵

GPB-1 Groundplane Kit

- 30% more power gain and lower angle of radiation for greater range.
- Kit includes 1 collar and 4 fiberglass radials.

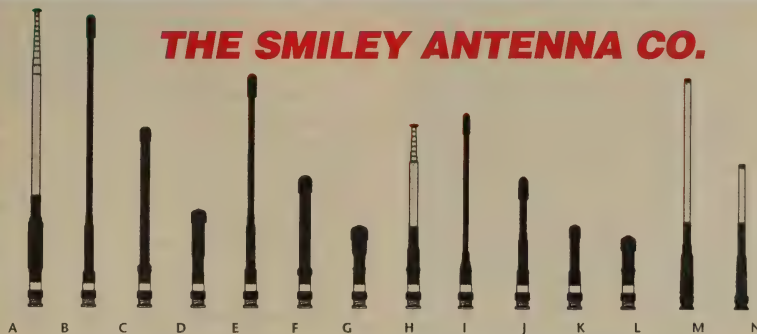
\$39⁹⁵



W2AU/W2VS 5-Band Antenna Kit Provides Low SWR on 80 & 40M and resonant performance on 10, 15 & 20M. Includes 40M traps, W2AU 1:1 balun, end insulators, 120 ft. of #14 stranded copper wire & instructions. 110 ft. long, rated 2KW PEP **\$85⁹⁵**



THE SMILEY ANTENNA CO.



Hand Tuned Antennas for Hand Held Radios

Each Smiley handheld antenna is individually hand tuned to resonance at band center under normal operating conditions. (No ground plane — No radials). Manufactured from the finest heat-treated copper plated spring steel coils. Cold rubber compound is used for coil insulation and a neoprene heat-shrink coating applied for strength & endurance. All have BNC connectors.

THIN STICK 1/4-wave telescoping dual band antenna for 144 and 220MHz bands (TS) **\$16⁹⁵**

SUPER STICK II (A) 2M, 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain fully extended. Usable fully collapsed, or one section 1/4 wave. Length: 54" extended, 10" collapsed..... (SS-II) **\$19⁹⁵**

SUPER STICK II COMBO As above, but includes a 2M Stubby Duck antenna (D) (SS-II/COMBO) **\$26⁹⁵**

5/8 SLIM DUCK (B) 2M, 5/8-wave, 7db gain, flexible base loaded antenna. 12" long ... (5/8 SLD-2) **\$17⁹⁵**

5/8 SLIM DUCK COMBO As above, includes a 2M meter Stubby Duck (D) ..(5/8 SLD-2 COMBO) **\$24⁹⁵**

REGULAR DUCK (C) For 2M. Tuned Ducks show a 3db gain over other Rubber Ducks because they are impedance matched for hand-helds..... (RD-2) **\$14⁹⁵**

STUBBY DUCK (D) Tuned, for 2M.....(RDS-2) **\$14⁹⁵**

SUPER STICK III A 220MHz 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain extended; usable collapsed, or a one-section 1/4-wave. 36" extended, 8 3/4" collapsed.....(SS-III) **\$19⁹⁵**

SUPER STICK III/COMBO As above but includes a 220MHz Stubby Duck (G) ... (SS-III/COMBO) **\$26⁹⁵**

5/8 SLIM DUCK (E) 220MHz, 7db gain, flexible base loaded antenna. Length: 9" (5/8 SLD-220) **\$17⁹⁵**

5/8 SLIM DUCK COMBO As above, but includes a 220MHz Stubby Duck (G).....(5/8 SLD-220 COMBO) **\$24⁹⁵**

REGULAR DUCK (F) 220MHz, tuned.....(RD-220) **\$14⁹⁵**

STUBBY DUCK (G) 220MHz, tuned.....(RDS-220) **\$14⁹⁵**

SUPER STICK IV (H) 440MHz 5/8-wave, flexible telescoping antenna. 6-9db gain extended; usable collapsed. 18" extended, 5 3/4" collapsed.....(SS-IV) **\$19⁹⁵**

SUPER STICK IV COMBO As above, but includes a 440MHz Stubby Duck (K)..... (SS-IV/COMBO) **\$26⁹⁵**

SLIMLINE (I) 440MHz, 1/4-wv. flex.. (SL-440) **\$12⁹⁵**

5/8 SLIM DUCK (J) 440MHz, 7db gain, flexible base loaded antenna. Length: 5"(5/8 SLD-440) **\$17⁹⁵**

5/8 SLIM DUCK COMBO As above, but includes a 440MHz Stubby (K) .. (5/8 SLD-440 COMBO) **\$24⁹⁵**

STUBBY DUCK (K) 440MHz, tuned (RDS-440) **\$14⁹⁵**

MINI DUCK (L) 440MHz, tuned (RDMD-440) **\$14⁹⁵**

FLEX-COIL (M) 2M, 1/2-wave, 7-9 db gain, flexible base, 35" fully extended.....(FLX 1/2 WAV2M) **\$25⁹⁵**

270A (N) Telescoping 2m/440 gain antenna. 1/4-wave (2m) 5/8-wave (440 MHz) **\$19⁹⁵**

TAQ 1/4-wave whip antenna, specify for 2M, 220 or 440MHz **\$10⁹⁵**

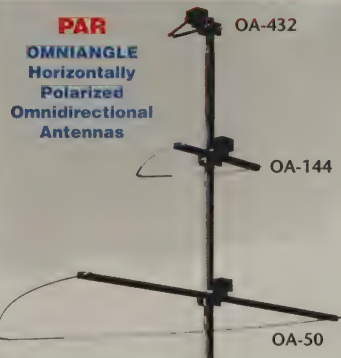
OMNIANGLE models for 10m, 6m, 2m, 220MHz and 440MHz (fixed or mobile). The perfect complement to high-gain directional arrays, allowing all-direction local work and monitoring for DX.

Outperforms halos, loops and turnstiles — it's considerably longer than a halfwave dipole, and coupled with the unique triangle shape, yields a horizontally polarized antenna whose pattern is within 0.8db of being a perfect circle, while exhibiting wide bandwidth.

Rated at 150W, it's built-in matchbox and current balun allow feeding with 52Ω coax and easy tuning to the desired frequency with a perfect match. The design virtually eliminates severe detuning due to moisture.

Stack two or four OMNIANGLES for an omni-pattern, with low angle radiation and gain equivalent to small to medium sized Yagi antennas.

OA-28 28-30MHz	\$74⁹⁵	OA-222 222-224MHz..	\$54⁹⁵
OA-50 49.5-54MHz	\$63⁹⁵	OA-432 420-450MHz..	\$54⁹⁵
OA-144 138-150MHz.....	\$54⁹⁵		



The Freedom Antenna A concealed-disguised antenna system that mounts on-glass, inside the vehicle. Uses an advanced, copper-etched serpentine array contour design. At .013" thick, its ultra-thin interior-mount design virtually disappears into your windshield. At only 3 3/8" square, its "stealth-like" finish blends totally into the glare band. Simply locate the recommended area on your windshield interior. Then, apply like a decal, route the cable and connect to your radio. No holes to drill, no magnet scratches, no suction cup smudges and no clips.

HVA-146 140-155 MHz — **\$69⁹⁵** • **HVA-460** 435-480 MHz — **\$69⁹⁵**

• • • • / VERSATILE
MULTIBAND
VERTICAL
ANTENNAS

- Offering 2, 6 and 9 Band Verticals with optional 160 Meters. Butternut's unique, **patented design** solves traditional problems that are associated with vertical antennas. Many verticals rely on lossy traps to offer multiband performance - which causes narrowed bandwidth. The Butternut trap-free design offers superior bandwidth and much greater radiation efficiency.

VSWR @
Resonance: 1.5:1 or less on all bands



A SUBSIDIARY OF **BENCHMARQ INC.**

A diagram of a horizontal beam with a central support. On the left end, there is a weight labeled '100'. On the right end, there is a weight labeled '150'. The beam is balanced on a central pivot point.

G5RV-M 1.8–30MHz, 204ft., 65 ft. twinlead..... **\$50⁹⁵**

IAC-160M Bazooka, (160M), 248 ft. long **\$195⁹⁸**

REDUCED PERFORMANCE ON 17 & 12 METERS

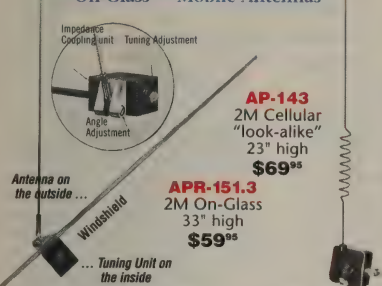


831 N. Central Avenue, Wood Dale, IL 60191
http://www.bencher.com email: bencher@bencher.com



ANTENNA SPECIALISTS

"On-Glass™ Mobile Antennas



AP-143
2M Cellular
"look-alike"
23" high
\$69⁹⁵

APR-151.3
2M On-Glass
33" high
\$59⁹⁵

No holes to cut! The small Tuning Unit attaches to the glass inside the vehicle, and couples capacitively thru-the-glass to the Radiating Element mounted on the outside. Installs w/easily removable adhesive. Includes adhesive, 15 ft. of coaxial cable w/PL-259 connector.

Power 100 watts Radiator Electrical 1/2-wave
Frequency Range 144-174 MHz Coupling Unit shunt fed, DC and
(APR-151.3) Whip Material Stainless steel,
138-150 MHz (AP-143) black DURA-COAT™ finish
Bandwidth 6 MHz, tunable Whip Length 33 in. (APR-151.3)
VSWR Less than 1.5:1 23 in. (AP-143)
Impedance 50Ω nominal Cable 15 ft. RG-58/U w/PL-259

MJF HT RANGE EXTENDERS

MJF-1714 Long Ranger™ 2M
Halfwave For really long range this MJF end-fed halfwave is hard to beat. It out performs a 5/8 wave on a handheld because the 5/8 wave needs a ground plane where the MJF halfwave does not. It is shorter, lighter, has more gain and places less stress on your antenna connector than a 5/8 wave antenna. When collapsed, it performs like a rubber duck. It is 40" extended and 10 1/2" collapsed **\$16⁹⁵**

MJF-1712 Dual Bander™ 2M and 440 MHz Got a new dual-band handheld or separate units? One antenna fits all. It's 1/4 wave for 2M and 5/8 wave with gain for 440 MHz. 7 1/2" collapsed, 19" extended **\$14⁹⁵**

MJF-1710 Pocket Linear™ 3/8 Wave, 2M Carry in your pocket like a ballpoint pen. When using your rubber duck, on the fringe and noisy, put on the Pocket Linear, extend to 24 1/2" and carry on your QSO. Pocket clip. 5 1/2" collapsed **\$9⁹⁵**

Forbes Group Ventenna™

Get around those antenna restrictions and finicky neighbors. The Ventenna is virtually unnoticeable - it looks like part of the normal structure. To install, just slip it over an existing 1"-2 1/2" plumbing vent pipe, connect the coax - you're on the air.

Ready to go! - No Tuning or Measuring required.

Single band models for 2 meters, 220MHz or 440MHz & a 2M/440MHz Dual Bander.

VT-14 2 meters, 3 ft. tall, 2.6dB gain **\$49⁹⁵**
VT-22 220MHz, 25" tall, 2.6dB gain **\$49⁹⁵**
VT-27 2m/440MHz Dual bander **\$74⁹⁵**
VT-44 440MHz, 14" tall, 2.6dB gain **\$49⁹⁵**
VT-155 Scanner model 3 ft. tall, 2.6dB **\$49⁹⁵**

COMET™

40 to 2M Mobile Antenna

CA-HV (left) Designed specifically for use with the new radios that cover HF and include 6 and 2M. Choose either 1 or 2 of the following HF coils: 40/(*20)/15/10 meters along with constant operation on 6 & 2M. Unique fold-over hinge brings the antenna down to about 6" in height for entering garages. Mounts to most SO-239 type trunk mounts, and is about 6 ft. tall with the 40M resonator on the top.

COMET makes several duplexer combinations. The CF-530 combines both the HF/6 meter and 2 meter radio connectors into a single connector going to the CA-HV. Should you want to use separate HF, 6 Meter and 2 Meter antennas, the COMET CF-360B duplexer will separate the HF/6 meter radio connector back into an SO-239 for HF and SO-239 for 6 meters

CA-HV Antenna... **\$129⁹⁵** *20M coil optional

L-14 14MHz coil... **\$36⁹⁵**

CF-530 HF/2M-440MHz Duplexer... **\$69⁹⁵**

CF-360B HF/6M-440MHz Duplexer... **\$69⁹⁵**

HA-4S HF Mobile Antenna (right)

Bandswitches between (4) HF bands without stopping to change coils or moving plugs. Standard coils include 40, 15, 12, 10M a 20M coil is optional. Compact and lightweight, only 4' 10" tall and 1 lb, 14 oz. Mounts on trunk-clip style bracket, the COMET RS-820, or the RS-80 rain gutter mount. Construction includes gold-plated PL-259 at the base, and a threaded collar that unscrews to expose a convenient hinged base that allows a 90° fold-over for garaging **\$179⁹⁵**

CYA-240 Dual Band 2M/70cm Antenna

Unique design with (5) UHF in front of (3) VHF elements on a 5'3" boom. Keeping yagis separate from each other provides best radiation pattern. Gain is 7.4 dBd on 144-148MHz and 9.5dBd on 440-450MHz w/FB ratio of 18dB. Power divider is included. High-grade aluminum/stainless steel hardware compliments design making the CYA-240 a rugged performer. Wing nuts used to hold elements in place, making portable use easy. Designed for vertical or horizontal polarization. Rated 300W SSB, & 150W FM. Perfect for packet, emergencies, or directing more output power to a contact station while reducing receive interference. Accepts masts 1 1/4 to 2 1/2", 4 lbs. 7oz **\$99⁹⁵**

NEW!

CA-52HB4 Wide Band 6 Meter Beam

Type.....HB9CV, 4-element	Max Power.....400W, SSB
Frequency.....50MHz band	Boom Length.....10.5 ft.
Impedance.....50Ω	Turning Radius.....7.3 ft.
VSWR.....<1.5:1 (50-54MHz)	Connector.....SO-239
Gain.....10.4 dBi	Mast Dia.....1.0 to 2.5 in.
Half Power Angle.....<5°	Weight.....4 lbs, 10 oz
F/B ratio.....Over 19 dB	PRICE \$119⁹⁵

GH-50 6 Meter Vertical Antenna

Type.....Omnidirectional	Bandwidth .1 MHz, tunable
Frequency.....50MHz band	Gain. 2.5dBi over 1/4-wave
Construction.....One piece white fiberglass with tuning stub on top	Maximum Power.....20W SSB
Length.....7 ft., 10 in.	60W FM
Impedance.....50Ω	Connector.....SO-239
VSWR.....1.5:1 or less	Weight.....2 lbs, 10 oz.
	PRICE \$109⁹⁵

MJF MJF ENTERPRISES, INC.

1786 Super Hi-Q Loop™

A remotely tuned high-Q antenna. Only 36 inches in diameter, the smallest high efficiency 10 to 30 MHz antenna made for Ham radio. It does not need a ground, radials, counterpoise or antenna tuner and handles 150W. Vertical mounting gives both low angle radiation for excellent DX and high angle radiation for close-in local contacts. Mounts horizontally for omni-directional coverage. No control cable needed, the coax feedline carries both RF power and tuning control signals.

The included Super Remote Control makes the Super Hi-Q Loop™ easy to tune. Exclusive Automatic Band Selection™ auto-tunes the MJF-1786 to the desired band. Two-range Cross-Needle SWR/Wattmeter is built-in. Uses 8 "D" batteries (not included), totally portable. 110V AC power supply is included. **\$289⁹⁵**

NEW WAVE Antenna

PORTABLE Collapsible Masts



For Portable or Temporary antenna installations!

These are 7-section, telescoping masts manufactured from high-quality, 6061-T6 polished aircraft aluminum with a taper from 2" to 1 1/4". Lightweight, are easily raised by one person at ground level in seconds. Each section joint has a 4" overlap and snaps into place. Conveniently rotates at any section along its length, or securely locks into place.

Options: a handy snap-on antenna mount and park-on steel mount.

Adventurer

47" to 12 ft, 4 1/2 lbs. **\$109⁹⁵**

Traveler

59" to 19 ft, 6 1/2 lbs. **\$124⁹⁵**

Rover

71" to 26 ft, 8 1/2 lbs. **\$149⁹⁵**

Expeditioner

83" to 33 ft, 10 1/2 lbs. **\$174⁹⁵**

Explorer

95" to 40 ft, 12 1/2 lbs. **\$199⁹⁵**

Big Foot

Park-on mount, 8 1/2 lbs **\$119⁹⁵**

Snap-on Mount

Antenna mount. Attach antennas to portables without tools. Adds 12" to the top. **\$19⁹⁵**

Used & Demo
equipment lists


Updated regularly on the web. Check them out and order **On-line**

We now have a

SECURE web site
Order on-line at www.aesham.com

ANTENNA ACCESSORIES

Coaxial Cable, Rotor, Antenna & Ground Wire

Belden number	RG-type	Dia. (in.)	Center conductor	Insulation type	Shield coverage	Jacket type	Imp. (Ω)	Vel. factor	Loss/100' 100 MHz
 9201	58/U	.193	#20 solid copper	Solid polyethylene	78% bare copper	PVC	53	66%	4.5 dB
8240	58/U	.193	#20 solid tinned cop.	Solid polyethylene	95% tinned copper	PVC	53.5	66%	3.8 dB
8259	58A/U	.193	#20 stranded tinned cop.	Solid polyethylene	96% tinned copper	PVC	50	66%	4.9 dB
8219	58C/U	.193	#20 stranded tinned cop.	Cellular polyethylene	96% tinned copper	PVC	50	78%	4.5 dB
8262	58/CU	.193	#20 stranded tinned cop.	Solid polyethylene	95% tinned copper	Non-contam. PVC	50	66%	4.9 dB
9258	8/X	.242	#16 stranded copper	Cellular polyethylene	95% bare copper	PVC	50	78%	3.7 dB
8237	8/U	.405	#13 stranded copper	Solid polyethylene	97% bare copper	PVC	52	66%	1.9 dB
8214	8/U	.405	#11 stranded copper	Cellular polyethylene	97% bare copper	PVC	50	78%	1.8 dB
9913	8/U	.405	#10 solid copper	Semi-solid polyethylene	100% foil + 88% braid	PVC	50	84%	1.3 dB
9913F*	8/U	.405	#10 stranded copper	Cellular polyethylene	100% foil + 90% braid	PVC	50	83%	1.3 dB
*High-Flex	8A/U	.405	#13 stranded copper	Solid polyethylene	97% bare copper	Non-contam. PVC	52	66%	2.2 dB
8267	213/U	.405	#13 stranded copper	Solid polyethylene	97% bare copper	Non-contam. PVC	50	66%	2.1 dB
8241	59/U	.240	#22 solid copper	Solid polyethylene	95% bare copper	PVC	73	66%	3.4 dB
8238	11/U	.405	#18 stranded tinned cop.	Solid polyethylene	97% bare copper	PVC	75	66%	2.0 dB
8213	11/U	.405	#14 solid copper	Cellular polyethylene	95% bare copper	PVC	75	78%	1.5 dB

Rotor Cable
8449 Standard duty, 8 wire. Consists of 6-#22 and 2-#18 tinned copper conductors. PVC insulation and PVC jacket. For run up to 100 ft.
9405 Heavy duty, 8 wire. Consists of 6-#18 and 2-#16 tinned copper conductors. PVC insulation and PVC jacket. For runs over 100 ft.
8484 Standard duty, 4 wire. Consists of 4-#20 tinned copper conductors. PVC insulation and jacket.

Antenna & Ground Wire
8000 #14 AWG (7x22), stranded bare copper-covered steel Antenna Wire.
8018 #8 AWG (solid), soft annealed aluminum Ground Wire - multiples of 50 ft.

See
Belden in
the Price
List

Van Gorden Engineering

Ladder Line

450Ω 100 ft 18 ga. insulated ladder line	\$12 ⁹⁹
450Ω 100 ft 14 ga. insulated ladder line	\$24 ⁹⁹
450Ω 1000 ft 18 ga. insulated ladder line	\$99 ⁹⁹
450Ω 1000 ft 14 ga. insulated ladder line	\$199 ⁹⁹

White Nylon Rope

NR-100 100 ft. roll, antenna guy rope	\$4 ⁹⁹
NR-1,000 1000 ft. roll, antenna guy rope	\$44 ⁹⁹

N Connector

Male connector for Belden 9913 & 8214 coax..... \$4⁹⁹

AIM Coaxial Cable Stripper



For quick, clean preparation of coaxial cable without damage for installation of connectors. Simply insert coax into tool, turn clockwise 4 or 5 times.

24-7735P for RG-58, RG-59, RG-63	\$21 ⁹⁹
24-7736P for RG-6, RG-59, 8281	\$21 ⁹⁹
24-7739P for RG-8, RG-11, RG-213	\$28 ⁹⁹

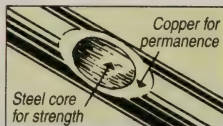


CASTLE RIDGE PRODUCTS, INC

COPPERWELD®

Antenna Wire

FORGE-WELDED makes the two metals inseparable!



Solid bare copper-over-steel wire - the Best for antennas

Very strong, the steel core has very little stretch and long service life. The copper covering provides low RF resistance and is easy to solder. Choice of 12, 14 or 18 gauge; 100, 150, 250, 500 or 1000 ft. rolls.

AN-122 100 ft. #12	\$24 ⁹⁹	AN-143 150 ft. #14	\$24 ⁹⁹
AN-123 150 ft. #12	\$29 ⁹⁹	AN-144 250 ft. #14	\$32 ⁹⁹
AN-124 250 ft. #12	\$49 ⁹⁹	AN-145 500 ft. #14	\$56 ⁹⁹
AN-126 500 ft. #12	\$84 ⁹⁹	AN-148 1000 ft. #14	\$99 ⁹⁹
AN-128 1000 ft. #12	\$139 ⁹⁹	AN-181 250 ft. #18	\$14 ⁹⁹
AN-142 100 ft. #14	\$19 ⁹⁹	AN-182 500 ft. #18	\$24 ⁹⁹



Constructed of strong, double braid Dacron® Black for UV protection. Resistant to mildew & abrasion. Ties & cuts easily, sealing effectively w/hot knife.

• 100 ft. 1/2" \$6⁹⁹ • 350 ft. 3/4" \$39⁹⁹



Handy Preassembled Coaxial Hook-up Cables.



AIM ELECTRONICS

64-6UUP 6' RG-58 w/PL-259s	\$4 ⁹⁹
64-9UUP 9' RG-58 w/PL-259s	\$5 ⁹⁹
64-12UUP 12' RG-58 w/PL-259s	\$6 ⁹⁹
64-18UUP 18' RG-58 w/PL-259s	\$7 ⁹⁹

BELDEN

9349 3' RG-58AU low-loss foam w/PL-259s	\$14 ⁹⁹
9350 15' RG-58AU low-loss foam w/PL-259s	\$16 ⁹⁹
9352 50' RG-58AU low-loss foam w/PL-259s	\$24 ⁹⁹
9354 50' RG-8U low-loss foam w/PL-259s	\$46 ⁹⁹
9355 75' RG-8U low-loss foam w/PL-259s	\$64 ⁹⁹
9356 100' RG-8U low-loss foam w/PL-259s	\$79 ⁹⁹

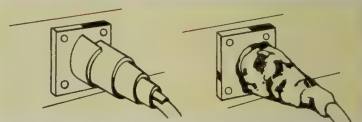
VAN GORDEN

8X-35T 3' RG-8X w/silver-terfon PL-259s	\$8 ⁹⁹
8X-65T 6' RG-8X w/silver-terfon PL-259s	\$10 ⁹⁹
8X-125T 12' RG-8X w/silver-terfon PL-259s	\$11 ⁹⁹
8X-255T 25' RG-8X w/silver-terfon PL-259s	\$15 ⁹⁹
8X-505T 50' RG-8X w/silver-terfon PL-259s	\$24 ⁹⁹
8X-755T 75' RG-8X w/silver-terfon PL-259s	\$31 ⁹⁹
8X-1005T 100' RG-8X w/silver-terfon PL-259s	\$37 ⁹⁹
213-35T 3' RG-213 w/silver-terfon PL-259s	\$11 ⁹⁹
213-65T 6' RG-213 w/silver-terfon PL-259s	\$14 ⁹⁹
213-125T 12' RG-213 w/silver-terfon PL-259s	\$18 ⁹⁹
213-255T 25' RG-213 w/silver-terfon PL-259s	\$25 ⁹⁹
213-505T 50' RG-213 w/silver-terfon PL-259s	\$38 ⁹⁹
213-755T 75' RG-213 w/silver-terfon PL-259s	\$54 ⁹⁹
213-1005T 100' RG-213 w/sil-terfon PL-259s	\$72 ⁹⁹

Antenna, Coax & Connector Protection Products



Hand Moldable Plastic for Antenna Component Protection



The quickly and effective way to seal and protect all types of coaxial fittings, baluns, antenna parts and connectors. Simply wrap it on like regular tape, then mold it to any shape. It adheres tightly to metal, vinyl and polyvinyl coax outer jackets. Stays flexible and sealed at any temperature for years to resist moisture penetration and deterioration. Its permanent flexibility makes it possible to remove and re-install fittings, then re-seal just by re-forming the same material. Non toxic and non-contaminating. Roll, 1/2" w x 60".....UNV 104 \$2⁹⁹

PENETROX® A

Recommended for use on aluminum to aluminum and aluminum to copper connectors, on bare conductors, and on bus bars. Good for all voltages. Assures high conductivity joint by sealing out air and moisture to prevent corrosion and reformation of oxide film. Apply to mating pieces of antenna components, tubing, etc. during assembly to provide a non-corrosive, low resistance and air tight seal. Makes disassembly at a later date a breeze..... (4oz bottle) \$12⁹⁹



STUF Dielectric Waterproof Connector Filler - seals out moisture

High purity macroscopic foam that dielectrically simulates the coaxial cable core. Fill coax connectors and tighten. The filler material hydraulically channels into all connector voids and points of moisture entry. Non-hardening, easy to removal. No silicones, or other additives to harm coax cable material..... CRS STUF (tube) \$4⁹⁹



MFJ MFJ ENTERPRISES, INC.

ANTENNA TUNERS



MFJ-945E Mobile Tuner (top) Covers 1.8 to 30 MHz, and rated at 300W PEP. Matches coaxial cable only. Extends mobile antenna bandwidth and eliminates having to stop and adjust the whip length when making frequency changes. Lighted Cross-Needle SWR bridge & Power meter with 50/300 and 5/30W ranges. 8" w x 2" h x 6" d..... **\$99⁹⁵**

MFJ-941E Versa Tuner II Covers 1.8 to 30 MHz and rated at 300W PEP. Matches everything! - coaxial fed dipoles, vees, whips, verticals, beams, random wires and balanced lines, has a built-in 4:1 balun. Lighted Cross-Needle SWR/Power meter with 300/50W and 30/5W ranges. Convenient 8-position antenna selector for 2 coax lines, random wire or balanced line or an external dummy load. 10 1/2" w x 2 1/2" h x 7" d..... **\$109⁹⁵**

MFJ-934 Antenna Tuner/Artificial Ground Makes a random wire an effective antenna. Combines the best features of the MFJ's 941E and 931 into one unit. A full-featured 1.8 to 30MHz, 300W antenna tuner with Cross-Needle meter and Ground Matching knob that lets you switch in inductance to bring an attached random length wire to a low impedance current point, forming an artificial ground. 10 1/2" w x 3 1/2" h x 7" d.... **\$159⁹⁵**

MFJ-948 Has all the features of the 941E but without the dummy load. Has a larger lighted peak reading Cross-Needle SWR/Power meter **\$119⁹⁵**

MFJ-949E Deluxe Versa Tuner II The same power, tuning and switching capability as the 941E. Has a larger, lighted peak or average reading Cross-Needle SWR/Wattmeter. Pre-Tune™ feature allows off-the-air tune-up into built-in a 50 ohm dummy load. 10 1/2" w x 2 1/2" h x 7" d..... **\$139⁹⁵**

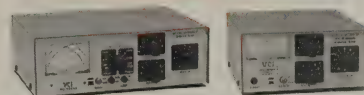
MFJ-969 Deluxe Versa Tuner II Covers 6 thru 160 meters and rated at 300W. Features a roller inductor coil with a spinner knob and 3-digit turns counter. Lighted peak or average reading Cross-Needle SWR/Wattmeter with 30/300W ranges. Tunes coaxial cable, random wire or balanced feed-line, has a built-in 4:1 balun. QRM-Free Pre-Tune™ feature allows off-the-air tune-up into a built-in 50 ohm 300W dummy load. Convenient 8-position antenna selector. 10 1/2" w x 3 3/4" h x 9" d..... **\$179⁹⁵**

MFJ-962D Versa Tuner III Covers 1.8 to 30 MHz and rated at 1.5KW PEP. Matches coaxial fed antennas, random wire or balanced line, has a built-in 4:1 balun. Lighted peak or average Cross-Needle SWR/Wattmeter with 200/2000W ranges. Six position selector for 2 coax lines (direct or thru tuner), random & balanced lines. 10 1/2" w x 3 3/4" h x 15" d..... **\$249⁹⁵**

MFJ-986 Differential-T Tuner™ Covers 1.8 to 30 MHz and rated at 3KW PEP. Uses a broadband T-network w/roller inductor & differential capacitor. Tunes most antennas using only two knobs. Lighted peak or ave. reading Cross-Needle SWR/Wattmeter with 200/50W & 2000/500W ranges. Inductor spinner knob, 3-digit turns counter, 6-pos. antenna selector, external dummy load switch, 4:1 balun. 10 1/2" w x 4 1/2" h x 15" d..... **\$299⁹⁵**

MFJ-989C Versa Tuner V Covers 1.8 to 30 MHz and rated at 3KW PEP. Super duty Components. Matches nearly every type of antenna. Roller inductor with spinner knob and 3-digit turns counter. Lighted peak or average reading Cross-Needle SWR/Wattmeter with 200/2000W ranges. Built-in 50Ω 300W dummy load, 3KW 4:1 balun, six-position antenna selector and convenient flip-stand. 10 1/2" w x 4 1/2" h x 15" d..... **\$319⁹⁵**

VECTRONICS ANTENNA TUNERS



VC-300M Mobile Tuner (right) Compact, lightweight and economical for base or mobile use. Tunes verticals, dipoles, inverted V's, beams and mobile whips that are fed by coaxial cable. Also tunes open wire feeders, balanced lines, or single wires. Covers 1.8 to 30 MHz at 300W continuous power. The dual-movement cross-needle meter simultaneously monitors RF power output & SWR. 7 1/2" w x 3 1/2" h x 8 1/2" d, 2 1/2 lbs..... **\$99⁹⁵**

VC-300DLP Antenna Tuner (left) A quality, economical tuner. Covers 1.8-30 MHz at 300W continuous power capability from 3.5-30MHz & 150W on 1.8MHz. Built-in dummy load, dual-movement cross-needle peak or average reading meter. Compatible with almost any antenna - coax fed, balanced or single wire. Built-in 4:1 balun and six-position antenna selector switch 10 1/2" w x 9 1/2" d x 3 1/2" h, 3 1/2 lbs..... **\$149⁹⁵**

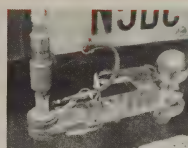


VC-300D Antenna Tuner (right) Same functions & specifications as the VC-300-DLP shown above, but has the additional capability to show a peak power indication by using an instantaneous responding digital bargraph meter display. A LEVEL and DELAY control has been added to calibrate the display to the meter, and to vary the delay response..... **\$179⁹⁵**

HFT-1500 Antenna Tuner (left) Rated for 1500W from 1.8-30MHz; 1000W (2KW PEP) on 160 & 10M. Features a cranked continuous roller inductor with a turns counter and vernier tuning on the antenna and input capacitors. The dual-movement cross-needle meter shows average forward and reverse power and SWR; a 21-segment bargraph indicates peak power. A true RF directional coupler sensor is used for the wattmeter circuitry. Includes a built-in 4:1 balun for balanced antenna systems and 6 position antenna selector switch. 5 1/2" x 12 1/2" w x 12" d, 10 lbs... **\$399⁹⁵**

MFJ MFJ ENTERPRISES, INC.

MFJ-310 HT Antenna Window Mount Clip Your HT rubber duck antenna radiates poorly inside your car due to the shielding effect of the roof, doors, etc. Detach the duck from your HT and install on this handy BNC window mount clip. It holds your antenna securely on the outside of your car's window where it can radiate freely. It's quick and easy to install and remove. Comes with 10 ft. feet of flexible mini-coaxial cable..... **\$14⁹⁵**



DC SALES

Tenna Hitch A heat treated, high strength aluminum bracket with an insulated 3/8" x 24 mounting stud. Installs under the ball of any Class-I or II trailer hitch. Handles the largest mobile antennas, and does not interfere with trailer towing capability. No holes to drill. All hardware is supplied..... **\$35⁹⁵**



COMET

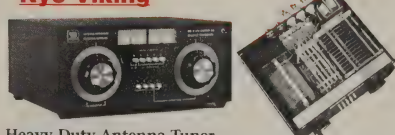
WS-1M Window Mounting Bracket Perfect for vehicles with pop-out windows, rental cars, etc. Adjustable, with suction cups on the inside and outside. Includes 11 ft. of coaxial cable with connectors. Heavy-duty, allows for mounting gain-type antennas such as the Comet B-20 or Comet SB-5 dual-bander models, etc..... **\$64⁹⁵**

Oak Bay Technologies

AM-101B Rubber Duck Window Mount Improves mobile HT performance by getting RF out of the car. Great for emergencies, rental cars, etc. Stainless steel bracket slips on top edge of car window, and rubber duck attaches to BNC mount on outside. Comes with 6 ft. of RG-174U coax with BNC connector. Rated at 15W **\$24⁹⁵**



Nye Viking



Heavy-Duty Antenna Tuner

MB-V-A 1.8-30MHz continuous tuning. Silver plated variable inductor with 25:1 vernier dial. 7kV variable capacitor and 15kV switch selected fixed output capacitors. Tunes most antennas. 1/4-wave length or longer from 40-2000Ω (some may not tune at 1.8 MHz). Automatic SWR metering without calibration. Separate automatically switched 300W/3KW RMS wattmeter. Quality 2 1/2" backlit meters continuously display SWR and power. Silver plated 5-position pushbutton antenna switch selects 4 antennas: 2 coaxial, single wire and balanced line, and bypass. Trifilar-wound 3KW toroid balun provides balanced output from 200 to 1000Ω, and unbalanced output down to 20Ω. Requires 9V batt. for meter and external 12VDC for meter lights. 14 1/2" w x 6 1/2" h x 12 1/2" d, 18 lbs..... **\$879⁹⁵**

PALOMAR Engineers

PT-340 Tuner-Tuner

Eliminate QRM, overheated final tubes and devices by adjusting your station antenna tuner without transmitting. Installs permanently between rig and antenna tuner. Just turn it on, and listen to the noise output in your receiver, then adjust your station tuner controls for a dip in the noise (a null). Covers 1.7 to 30MHz. Uses 9V battery. 6" w x 5" h x 3" d..... **\$99⁹⁵**



ORDER TOLL FREE
1-800-558-0411

help@aesham.com • www.aesham.com

ANTENNA ACCESSORIES

MFJ ENTERPRISES, INC. COAXIAL SWITCHES

MFJ-1702C Antenna Switch Two positions plus center ground, 50Ω. Rated to 500MHz with <0.2dB loss, 2.5KW PEP or 1 KW CW. >60dB isolation @ 300MHz or >50 dB @ 450MHz. Unused terminal auto. grounds for lightning protection **\$21⁹⁵**

MFJ-1702CN Lowest loss on UHF. Uses Type N connectors which are good up to 1.1 GHz **\$31⁹⁵**

MFJ-1704 Antenna Switch Four positions, plus center ground. 50Ω, rated to 500MHz with <0.2dB loss. Handles 2.5KW PEP, 1KW CW, >50dB isolation @ 500MHz. Includes a replaceable lightning protection device **\$59⁹⁵**

MFJ-1704N with Type N's **\$69⁹⁵**

MFJ-1701 Antenna Switch Six positions, for 50 to 75Ω systems. Rated for 2KW PEP or 1KW CW from 1.8-30MHz. Unused positions are grounded for lightning protection. 10" w x 3" h x 1 1/2" d. **\$49⁹⁵**

MFJ 1700B Antenna & Transceiver Switch Select up to 6 antennas and 6 rigs in any combination - tuner, SWR meter, linear, etc. Can be left in line to operate with any combination. 50 or 75 ohms. Handles 2KW PEP or 1KW CW from 1.8 to 30MHz. Unused positions are automatically grounded for lightning protection. 10" w x 3" h x 1 1/2" d. **\$79⁹⁵**

MFJ-270 Lightning Surge Protector Safeguard your ham gear from damage due to dangerous static charges and lightning induced surges. Replaceable ultra-fast gas discharge tube safely shunts up to 5000 amps of peak impulse current to an independent ground. Rated to 400W PEP, usable up to 1000MHz **\$29⁹⁵**

AMERITRON Remote Controlled Switches

RCS-4 Select up to 4 different HF antennas while using just one coaxial feed line, and no additional control cable is required. The weatherproof switch box locates out on the tower, mast or other remote location. The control box locates at your operating position and switches antennas with a control voltage routed directly through the coaxial cable. 1.8-30MHz, 2KW **\$129⁹⁵**

RCS-8V Independently or simultaneously select up to 5 different antennas using just one coaxial feedline and 8-wire control cable. Internal wiring allows user to ground or float unused terminals as required. 50Ω below 30MHz, and 1KW up to 150MHz **\$139⁹⁵**

DAIWA Industry Co., Inc.

CS-201 Two Position Coaxial Switch (right) A high quality coaxial switch with excellent high frequency RF characteristics due to cavity and heavy diecast metal construction. Frequency range up to 600MHz with less than 0.12 VSWR, less than 0.2dB insertion loss and 60dB isolation between terminals. Rated at 2.5 KW PEP or 1KW CW. Automatic grounding on unused terminals, SO-239 connectors **\$29⁹⁵**

CS-401 Four Position Coaxial Switch (left) Same features as the CS-201, but rated to 800MHz **\$129⁹⁵**

BW Coaxial Switches

52/75Ω • 2KW SSB • -60dB Isolation • <1.2:1 @150MHz
CSR-5G (right) Single pole, 5-positions. All unused positions are automatically grounded. Side SO-239 connectors. Desk, wall, or panel mount **\$51⁹⁵**
CS-6G Single pole, 6-positions. All unused positions are automatically grounded. SO-239 connectors **\$51⁹⁵**

PALOMAR Engineers

P-508 Active Preselector Install between receiver & antenna. Covers 200kHz-30MHz. High-Q tuned circuits reduce interfering signals on short-wave bands. FET-Bipolar amp provides over 20dB gain and tolerates strong local signals without overload better than older dual-gate technology. 9-15V DC. 2 1/2" h x 7 1/4" w x 2 1/2" d, 0.8 lb **\$99⁹⁵**

PT-3 Preamplifier Covers 160 to 6m, useable with either a receiver or transceiver. Tunable low noise dual-gate FET circuit provides >20dB gain, low N.F. and improved spurious and image rejection. RF sensed switch with variable delay automatically bypasses to antenna on transmit. Second rcvr or ant. capability. 12V DC, or use P-12T AC adapter (**\$9⁹⁵**). 2 1/2" h x 8 1/4" w x 6 1/2" d. **\$124⁹⁵**

TPA Tunable Preamplifier/Active Antenna Use as a preamplifier to improve the gain of a receiver, or as an indoor active antenna. Covers 0.22 to 30MHz in 5 bands. A dual-gate FET device provides an excellent N.F. and >20 dB gain. As a preamplifier, the input matches most antennas; long wire, 300Ω and random lengths. When no external antenna is available, the preamplifier's built-in 30" collapsible whip gives great results. Uses 9V battery or PT-9T AC adapter (**\$9⁹⁵**). 1 1/2" h x 8" w x 6 1/2" d. **\$76⁹⁵**

MIRAGE GaAsFET Preamps for 10, 6, 2, 1 1/2 m & 70 cm High Gain, Ultra Low Noise GaAs FET preamps improve weak reception by providing from 15-25dB of receive gain with a N.F. of <0.6dB. In-line design w/auto transmit & receive switching for up to 160W throughput. Choose in-shack model (KP-1), or mast mount model (KP-2) providing added benefit of reducing feedline loss. 10 different models - See Mirage in the Price List

KLM Fiberglass Masts Provide proper horizontal boom insulation for OSCAR operation, one 5' the other 7'. Care should be taken in selecting elevation rotator. Masts are too large for Alliance U-110 which is sometimes used. Masts will work w/Yaesu rotators. 5' x 1 1/2" O.D. **\$34⁹⁵** • 7' x 1 1/2" O.D. **44⁹⁵**

We now have a **SECURE** web site
Order on-line at www.aesham.com

UNADILLA REYCO W2V5 Antenna Traps

Add these traps to your dipole for multiband operation on two to six bands. For example: add the 40 meter pair (KW-40) and get 40 and 80 meter operation. For 10, 15, 20, 40, 80 and 160 meters, add all five pairs - 33 combinations! Selecting traps is easy. Just list the bands you want to cover, listing the highest frequency band first. You will need a pair of traps for each band except the one with the lowest frequency. Cost/pair.

KW-80CW 80m CW **\$48⁹⁵** **KW-17** 17 meters **\$41⁹⁵**
KW-80F 80m Phone **\$48⁹⁵** **KW-15** 15 meters **\$41⁹⁵**
KW-40 40 meters **\$42⁹⁵** **KW-12** 12 meters **\$41⁹⁵**
KW-30 30 meters **\$42⁹⁵** **KW-10** 10 meters **\$41⁹⁵**
KW-20 20 meters **\$41⁹⁵**

W2AU Ferrite Baluns

Smooth transition from unbalanced coaxial transmission line to balanced antennas such as dipoles, quads & yagis. Produces proper current distribution resulting in reduced feedline radiation for maximum power transfer, gain & reduced TVI/BCI. Replaces center insulator, DC grounded for lightning protection and has a convenient center eye hook for support. Usable from 1.8 to 40MHz, 2KW PEP.

1:1 or 4:1 ratio or 1:1 Beam Balun ea. **\$24⁹⁵**

W2DU Non-Transformer Choke Baluns A high efficiency, transformerless 1:1 balun. The HF model is the only one available that works on 160 meters! They all handle a VSWR up to 5:1 at the legal power limit, allowing use with antenna tuners. The VHF model eliminates the usual rod and tube hardware balun assembly normally used at those frequencies. Order model **HF** for 1.8 to 30MHz, **VHF** for 30 to 250MHz or **Beam Balun** for 40 to 10Mea. **\$26⁹⁵**

CENTAUR ELECTRONICS High Performance Baluns

- State-of-the Art • 0.5-50MHz performance with advanced toroidal transformer • 3KW SSB rated
- Extended performance in hostile environments • Stainless steel hardware • Heavy-duty body materials

Military grade internal components • 3" x 7"
B11W10-50 1:1, dipole **\$49⁹⁵** **B41LW10-50** 4:1, ladderline
B11Y10-50 1:1, yagi **\$49⁹⁵** to coaxial cable **\$64⁹⁵**
B41Y10-50 4:1, yagi **\$64⁹⁵**

Van Gorden Engineering

Hi-Q Balun \$14⁹⁵

- 1:1 or 4:1 impedance ratio for matching unbalanced coaxial cable to balanced antennas.
- For dipoles, yagis, inverted vees & doublets • Weatherproof
- Covers 3 to 40MHz, 1.5kW rating
- Replaces center insulator
- Reduces feedline radiation for more power into antenna, and less TVI & BCI problems.
- Built-in DC ground reduces noise and protects against lightning.
- SO-239 connector, center support eye hook.

Hi-Q Antenna Center Insulator \$6⁹⁵

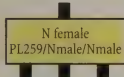


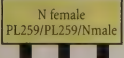
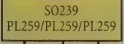
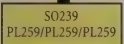
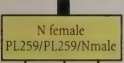
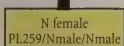
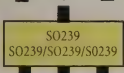
- Insulator only, no balun
- Replaces egg-type center insulator
- Small, rugged, lightweight, weatherproof, SO-239 connector, center supporting eye hook.

Antenna End End insulators pair **\$4⁹⁵**
Dog Bone Antenna insulators each **95¢**

When using a single multi-band antenna with dual or tri-band radios that have separate outputs you must use a duplexer or triplexer for proper operation.

LEADS	2m/440	2m/220	440/1200	HF/6 to 440
	No	COMET CF4160K DIAMOND MX72D MFJ916	DUPLLEXERS 	
	No	COMET CF4160I		
	No	COMET CF4160J LARSEN AD2/70 VALOR D270		
	Yes	COMET CF416A COMET CF530 DIAMOND MX72H	COMET CF142 DIAMOND MX214	COMET CF360A HF to 6/2m COMET CF706 DIAMOND MX62M
	Yes	DIAMOND MX72N YAESU AD3		
	No	COMET CF416C COMET CF416W	COMET413B COMET 416W	
	Yes		COMET CF4130A DIAMOND MX37	
	Yes		COMET CF413A	
	Yes			COMET CF360B

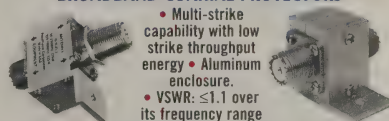
For duplexer/triplexer Prices see the Price List under the respective manufacturer

	LEADS	HF/6/2/440/1200	6/2/440	2/220/440
	No	COMET CFX4310B (also covers 900MHz range)	TRIPLEXERS  	
	No	COMET CFX4310C DIAMOND MX3000D		
	Yes	DIAMOND MX2000	COMET CFX324A COMET CFX514	COMET CFX324A DIAMOND MX324
	No		COMET CFX5140 DIAMOND MX2000D	COMET CFX324D
	Yes	COMET CFX431B DIAMOND MX3000		
	Yes	COMET CFX431A DIAMOND MX3000N		
	No		COMET CFX5145	

PolyPhaser® Lightning Protection

PolyPhaser's Impulse Suppressors feature a hermetically sealed voltage sensitive gas tube. Additional components & unique design provide No DC Continuity with low loss to assure surge voltages & currents that form differentially on the coaxial cable are prevented from being shared by your equipment. 10 year Warranty.

BROADBAND COAXIAL PROTECTORS



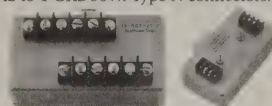
- Multi-strike capability with low strike throughput energy • Aluminum enclosure.
- VSWR: ≤1.1 over its frequency range

FLANGE MOUNT (right)

IS-SOUX-CO Frequency Range: 1.5MHz to 400MHz. Max. Power: HF 2KW, VHF 375W, UHF 125W .. **\$61⁹⁵**
IS-SOUX-C1 Frequency Range: 50MHz to 700MHz. Maximum Power: VHF 375W, UHF 125W **\$61⁹⁵**
IS-SONX-C2 Range: 125MHz to 1000MHz. Maximum Power: VHF 375W, UHF (low) 125W, 800MHz to 1 GHz 50W. Type-N connectors **\$61⁹⁵**

BULKHEAD MOUNT (left)

IS-B50LU-CO Frequency Range: 1.5MHz to 400MHz. Max. Power: HF 2kW, VHF 375W, UHF 125W .. **\$64⁹⁵**
IS-B50LU-C1 Frequency Range: 50MHz to 700MHz. Maximum Power: VHF 375W, UHF 125W **\$64⁹⁵**
IS-B50LN-C2 Range: 125MHz to 1000MHz. Maximum Power: VHF 375W, UHF (low) 125W, 800MHz to 1 GHz 50W. Type-N connectors..... **\$64⁹⁵**

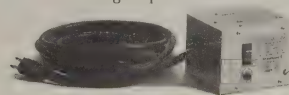


ROTOR CONTROL PROTECTOR

IS-RCT (left) Provides lightning protection for rotor controllers, motors, control box and other nearby equipment. EMP rated - faster than other gas tubes with lower turn-on voltage. Water tight enclosure with mounting stud. 7 1/2" h x 3 1/4" w x 2 1/2" d **\$54⁹⁵**

IN-LINE PHONE LINE PROTECTOR

IS-SPTL (right) Multi-stage protection, with large bandwidth and fast response time, EMP rated. For telephone trunk lines - handles standard ring voltages up to 105Vrms and surges up to 36kA **\$57⁹⁵**



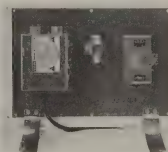
POWER LINE EXTENSION PROTECTOR

In-line, multi-stage EMP rated protectors provide multi-strike power line protection, filtering and proper grounding when equipment use requires extension cord. Two outlets, master on/off switch, and a circuit breaker for added protection. All aluminum grounded enclosure, 4 1/4" wide.

IS-PLDO-120-15A 15 ft. cord, 120V @ 15A .. **\$172⁹⁵**
IS-PLDO-120-20A 6 ft. cord, 120V @ 20A **\$215⁹⁵**

GROUNDING PANEL

CU-SGPP A .062" thick copper plate mounted on a melamine covered particle board. For mounting protectors and establishing a single grounding point for all station equipment. Comes with concrete anchors, mounting screws, two rolls of 10 ft. x 1-1/2 inch copper grounding strap and two copper sandwich bars for the strap. 18" w x 12" h, 16" on center mount .. **\$69⁹⁵**



LOW INDUCTANCE COPPER STRAP

Strap has an advantage over wire when used for grounds because it has lower inductance and cannot be fused open by lightning. 1-1/2 inch strap has a lower inductance than #2 stranded wire. Easy to cut and solder, usable above or in-ground, 26 AWG thickness. Available in 1-1/2, 3 and 6 inch widths; 25, 50, 75 or 100 ft. rolls **See Price List**



ORDER TOLL FREE 1-800-558-0411



PolyPhaser Corporation's coaxial impulse suppressors are a unique line of patented products. Hermetically-sealed voltage sensitive gas tubes are used with additional components to assure that surge voltages and currents formed differentially on the coax are not conducted to the equipment input. There is no dc continuity from center pin to center pin on our dc blocked protectors.

Other gas tube protectors have dc continuity through their center pins and share the energy with the equipment before the gas tube turns on. Quarter wave stub protectors are also dc coupled devices. There is dc continuity between their center pins and the equipment input.

A PolyPhaser dc blocked protector only lets through our rated specification (low milli-, or microjoules). Peak voltage let-through is also significantly less than dc continuity protectors. PolyPhaser's measured let-through energy and voltage is the industry's lowest.

- Multi-strike capability with low-strike throughput energy
- Aluminum enclosure
- VSWR: ≤ 1.1 over its frequency range

● FLANGE MOUNT

IS-50UX-C0 Frequency Range: 1.5MHz to 400MHz;
Max. Power: HF 2kW, VHF 375W, UHF 125W

IS-50UX-C1 Frequency Range: 50MHz to 700MHz;
Max. Power: VHF 375W, UHF 125W

IS-50NX-C2 Frequency Range: 125MHz to 1000MHz;
Max. Power: VHF 375W, UHF (low) 125W, 800MHz to 1GHz 50W. Type N connectors

● BULKHEAD MOUNT

IS-B50LU-C0 Frequency Range: 1.5MHz to 400MHz;
Max. Power HF 2kW, VHF 375W, UHF 125W

IS-B50LU-C1 Frequency Range: 50MHz to 700MHz;
Max. Power VHF 375W, UHF 125W

IS-B50LN-C2 Frequency Range: 125MHz to 1000MHz; Max.
Power VHF 375W, UHF (low) 125W, 800MHz to 1GHz 50W. Type N connectors

● ROTOR CONTROL PROTECTOR

IS-RCT Provides protection for rotor controllers, motors, control box and other nearby equipment. EMP rated faster than other gas tubes with mounting stud. 7.5" h x 3.25" w x 2.5" d.

● IN-LINE PHONE LINE PROTECTOR

IS-SPTL Multi-stage protection, with large bandwidth and fast response time. EMP rated. For telephone trunk lines — handles standard ring voltages to 105Vrms. Handles surges up to 36kA.

● POWER LINE EXTENSION PROTECTOR

In-line, multi-stage EMP rated protectors provide multi-strike power line protection, filtering, and proper grounding when equipment use requires an extension cord. Two outlets, master on/off switch, circuit breaker for added protection. All aluminum-grounded enclosure. 4.25" wide.

IS-PLDO-120-15A 15' cord, 120V @ 15A

IS-PLDO-120-20A 6' cord, 120V @ 20A

● GROUNDING PANEL

CU-SPGP A .062" thick copper plate mounted on a painted 1/2" plywood backing. Mounting protectors & a single ground point established for station equipment. Comes with concrete anchors, all mounting screws, 10' of 1.5" copper grounding strap, 2 brass sandwich plates, and joint compound. 18" w x 12" h; 16" d center mount.

● LOW INDUCTANCE COPPER STRAP

Copper strap has an advantage over wire when used for grounds, as it has lower inductance, and cannot be fused open by lightning. For example: 1.25" strap has a lower inductance than #2.0 stranded wire. It's easy to cut, solder, etc. Usable above or in-ground applications. 26 AWG thickness (0.0159"). Available in 1.5, 3 & 6 inch widths, and 25, 50, 75 or 100 foot rolls.

PolyPhaser®
CORPORATION

A SMITHS INDUSTRIES COMPANY

www.polyphaser.com



YAESU Rotators are precision designed for a wide variety of antenna installation applications and are compatible with most U.S. made antenna tower accessory shelves. Smooth and quiet in operation, these rotators are housed in weatherproof, die-cast aluminum enclosures and permanently lubricated for years of maintenance-free operation under all climate conditions.

Models	G-2800SDX	G-1000SDX	G-800SDX	G-800S	G-450A	G-500A	G-5400B
Application	The top-of-the line rotator for extra heavy-duty antenna installations.. Total rotation range 450°, with presets	High-performance for medium and heavy-duty applications. Total rotational range 450°, with presets	High-performance for medium applications. Total rotational range 450°, with presets	For medium-duty applications, without presets	For HF/VHF light/medium-duty applications, without presets	Elevation rotator, for satellite earth station and other space communication antennas	Azimuth-Elevation rotator combination for satellite earth station and other space communication antennas.
Wind Load	34 sq.ft.	23 sq.ft.	17 sq.ft.	17 sq.ft.	10 sq.ft.	12 sq.ft.	11 sq.ft.
Stationary Torque	1,808 ft.-lbs.	433 ft.-lbs.	288 ft.-lbs.	288 ft.-lbs.	217 ft.-lbs.	145 ft.-lbs.	145 ft.-lbs.
Rotation Torque	57.8-181 ft.-lbs. ⁽¹⁾	43-79 ft.-lbs. ⁽¹⁾	43-79 ft.-lbs. ⁽¹⁾	43-79 ft.-lbs. ⁽¹⁾	43 ft.-lbs.	73 ft.-lbs.	44 ft.-lbs.
Max. Vertical Load	661 lbs.	440 lbs.	440 lbs.	440 lbs.	220 lbs.	440 lbs.	440 lbs.
Backlash	±1/2°	±2°	±2°	±2°	N/A	±3%	±4%
Mast Size	1½-2½"	1½-2½"	1½-2½"	1½-2½"	1½-2½"	1½-2½"	1½-2½" Boom: 1½"x 1½"
360° Rotation Time	48-150sec. ⁽¹⁾	35-74sec. ⁽¹⁾	35-74sec. ⁽¹⁾	44sec.	53sec.	N/A	50sec.
180° Elevation Time	N/A	N/A	N/A	N/A	N/A	61sec.	58sec.
Computer Interface	GS-23 (\$299 ^{ms})	GS-23	GS-23	GS-23	N/A	N/A	GS-232 (\$469 ^{ms})
Rotator Dia. x Height	8 x 13½"	7½x 12½"	7½x 12½"	7½x 12½"	7½x 12½"	10½x 7½"	12½x 7½"
Weight	13.2 bs.	7.7 lbs.	7.5 lbs.	7.5 lbs.	7.5 lbs.	7.3 lbs.	20 lbs.
Cable Requirement ⁽²⁾	6-wire	5-wire	5-wire	5-wire	6-wire	6-wire	2 x 6-wire
Price	\$1114^{ps} *	\$494^{ps} *	\$404^{ps} *	\$314^{ps} *	\$259^{ps}	\$254^{ps} *	\$514^{ps} *



GC-038
Mast Clamp for
450/800/1000/5400
\$31^{ps}

GC-048
Mast Clamp for
2800SDX
\$47^{ps}



GS-050
50mm Thrust Bearing
for 1-1/4" to 2" mast
\$31^{ps}



GS-065
65mm Thrust Bearing for
1-1/2" to 2-1/2" mast
\$47^{ps}

(1) On models with "SDX" suffix, rotation speed and torque vary with the speed control setting. (2) Belden 9405 (8-conductor) or equivalent is recommended.

***SALE PRICE with Instant Coupon thru 11/30/98**

L.L. Grace Communications Kansas City Tracker Automatic Satellite Tracking



The Kansas City Tracker when used in conjunction with a satellite tracking program, such as *InstantTrack*, can read the azimuth & elevation information generated by this software, and keep an antenna array pointed at the satellite during a pass.

The Kansas City Tracker/Tuner is an 8 bit PC board which will operate in an open ISA slot, in IBM Compatible computers, ranging from XT's to Pentium systems. It does not use any hardware interrupts or COM ports. It has its own DB25 type port, which is used to connect to both a rotor controller and either a dual band radio or two single band radios. An 8 ft. cable is provided, with a DB25 connector on one end, and an 8-pin DIN connector on the other. This cable can be used as is, to connect to a YAESU/KENPRO 5400/5600 rotor controller, or it can be modified, using instructions provided, for other types of controllers.

The **Kansas City Tuner** option consists of additional components on the KCT board and cannot be added after purchase. These components allow for Doppler compensation, primarily for digital satellite work. Instructions are provided for connecting a user supplied cable to the DB25 end of the KCT cable, for interfacing to either the serial port or mic-click input of the radio. This requires the use of an additional satellite tracking program such as *Quiktrak* or *WiSP*. There is no need to purchase a TTL to RS232 converter for your radio. The KCT can be switched to either type of output.

Kansas City Tracker GRAKCT \$229^{ps} • Kansas City w/Tuner Option GRAKCT/T \$319^{ps}



U-105 Antenna Rotator featuring a one-piece cast aluminum housing, large bearing surfaces, reinforced mast support and a ball bearing for the vertical load. Precision-cut, hardened steel drive train and high torque — well equipped to handle small to medium VHF/UHF amateur and the largest TV and FM arrays. Control unit is smooth and quiet, synchronized with the drive by synchronous motors..... **\$69^{ps}**

Rotation Range.....360° +5°-0° Support Mast Size.....1½" diameter
Rotation Time.....70 seconds Control unit ... 7" x 5¼" d x 2½" h
Rotation Torque.....8 ft.-lbs. Weight (Rotor + control) .10 lbs
Max. Vertical load.....100 lbs. Control cable (4-wire)Belden 8484

TB-105 Support Bearing for extra-sturdy installation when using the U-105 rotator. Relieves wear and tear on the drive unit imposed by wind loads. All ball bearing design, weather-tight seal. Installs on the support mast, above the U-105 **\$18^{ps}**

Martin Voyager Tower Systems

"So decidedly superior, there's no second choice!"

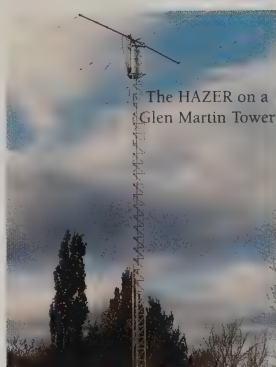
Why are Martin Voyager towers superior to others? Thoughtful engineering, quality materials, exceptional strength, beauty and durability. Glen Martin Engineering believes that a tower should be a lifetime investment that enhances one's home or business.

COMPLETE ALUMINUM & GALVANIZED STEEL TOWER PACKAGES INCLUDE: 10' sections, footing assembly, hinge base, HAZER (w/cable, winch, etc.), Kevlar cable guy kit, turn-buckles, earthscrew anchors, ground rod kit, & hardware.

NO CLIMBING REQUIRED. Why?

The Hazer does the climbing for you! The Hazer is a unique tram that rides up & down the outside of your Glen Martin or Rohn tower much like a flag goes up a flagpole. Raise and lower your antennas by simply turning a winch! Work on your antennas whenever you need, when you want! Hazer 2, 3, 4, 5 and 6 wrap around the tower and work best on 50 ft. towers. Hazer 7 & 22 incorporates its own separate track. See price list for additional accessories (lighting rods, thrust bearing, masts).

M1340A	40' x 13" Aluminum tower package w/Hazer 5
M1350A	50' x 13" Aluminum tower package w/Hazer 6
M1850A	50' x 18" Aluminum tower package w/Hazer 6
M1860A	60' x 18" Aluminum tower package w/Hazer 7
M1870A	70' x 18" Aluminum tower package w/Hazer 7
M-2210	100' x 22" Galv. Steel tower package w/Hazer 22



The HAZER on a Glen Martin Tower

Hazers for Rohn 20/25 G & 45G			
Order#	Max Ant. Load	Wind Ability	Material
H-2	175 Lbs.	12 Sq. Ft.	Heavy Aluminum
H-3	150 Lbs.	8 Sq. Ft.	Aluminum
H-4	200 Lbs.	16 Sq. Ft.	Galvanized Steel
VH8-60	60' Hazer for Rohn 45, 22 sq. feet @ 87 MPH		

ROOF-TOP TOWERS

- High Quality Anodized Aluminum/Satin Finish
- Lightweight & Extra Heavy Duty
- Stainless Steel Hardware/ Will Not Rust!
- Ideal for support of Ham Antennas, Scanners, Weather Monitors, AMSAT, etc.!
- Free Shipping* Within the 48 contiguous states. Additional charges apply outside the 48 states

E-mail: info@glenmartin.com



- See price list for more GME products & prices.
- Write or call for a complete GME catalog FREE!

MODEL	Height	D' Inches	Base Width	Wind Load ²	Max Ant. Weight	Ship Weight
RT-424	4.5'	34.75	24"	6sq.ft.	100	18 lbs.
RT-832	8.0'	43.75	32"	8sq.ft.	120	30 lbs.
RT-936	9.0'	43.75	36"	18sq.ft.	130	54 lbs.
RT-1832	17.5'	37.62	32"	12sq.ft.	110	62 lbs.
TB-25	Premium Thrust Bearing (Max Mast Dia 2.6")					3 lbs.

1 Distance from top surface to rotor mount. 2 Rated at 87 MPH

Web site: www.glenmartin.com



ROHN®

Heavy Duty HDX-Series Towers

All steel with X-brace construction for strength that allows a free-standing configuration without guy wires at 70 mph wind-speed with antennas up to 10 sq. ft. wind area and boom lengths not exceeding 10 ft. The galvanized steel provides an attractive and maintenance-free finish. The entire tower can be assembled on the ground and hinged up in to position with the optional hinged base, or built vertically, section by section. Supplied with BXB base stubs for concrete mounting, rotator plate, mast clamp and hardware. All makes of rotators can be installed on the rotator plate inside of the top section. Tubing furnished that can be held in place with the mast clamp on the top plate to act as a thrust sleeve for a 1-1/4 in. mast.

Factory Drop Ship

Model	Height	Sections	Windload @70mph	Weight	PRICE
HBX-40/ BXB-6	40'	5	10sq.ft.	276 lbs.	\$490 ⁹⁵
HBX-48/ BXB-7	48'	6	10sq.ft.	353 lbs.	\$653 ⁹⁵
HBX-56/ BXB-8	56'	7	10sq.ft.	444 lbs.	\$820 ⁹⁵
Heavier Capacity Duty HDXB - Series					
HDBX-40/ BXB-7	40'	5	18sq.ft.	330 lbs.	\$612 ⁹⁵
HDBX-48/ BXB-8	48'	6	18sq.ft.	422 lbs.	\$816 ⁹⁵

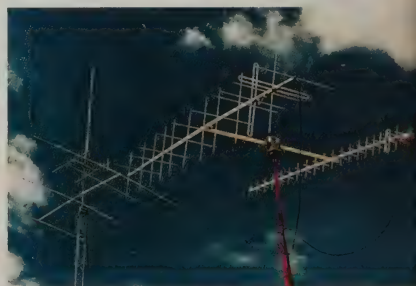
UNIVERSAL FREE STANDING ALUMINUM TOWERS

**RUGGED • LIGHTWEIGHT
RUST FREE • EZ INSTALL**

Configurations available from 30-100 feet with various wind load selections to meet almost any application. Self-Supporting - no need for unsightly guy wires at rated load

Factory Drop-Ship

For more information see the Price List & Index



The antenna system at AES Milwaukee



Check out our full line of accessories including: Tower Motor Drives
5 ft. to 20 ft. Antenna Masts • 20 ft. Chromolly Masts • Thrust Bearings • Mast
Raising Fixtures • Rotating bases • Coax support arms • Limit Switch Packages

MA SERIES CRANK-UP TUBULAR TOWERS

Will handle 10 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
MA-40	40 ft.	21' 6"	2	242	3" sq.	4 1/2"	12"x12"x12"	\$ 679.95
MA-550	55 ft.	22' 1"	3	435	3" sq.	6"	18"x18"x18"	1069.95
MA-550MDP*	55 ft.	22' 1"	3	620	3" sq.	6"	3'x3'x5'	2932.95
MA-770	70 ft.	22' 10"	4	645	3" sq.	8"	3'x3'x6'	2529.95
MA-770MDP*	70 ft.	22' 10"	4	880	3" sq.	8"	3'x3'x5 1/2'	3999.95
MA-850MDP*	85 ft.	23' 6"	5	1128	3" sq.	10"	4'x4'x6'	5391.95

*Standard bases and eave mounts included with all towers (except MA-770, 770-MDP and 850 MDP)

• MDP models complete with heavy-duty motor drive with positive pull down.

FREE STANDING HEAVY-DUTY CRANK-UP TOWERS

Will handle 18 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
TX-438	38 ft.	21' 6"	2	355	12 1/2"	15"	3'x3'x5'	\$1142.95
TX-455	55 ft.	21' 6"	3	670	12 1/2"	18"	3'x3'x6'	1399.95
TX-472	72 ft.	22' 8"	4	1040	12 1/2"	21 1/2"	4'x4'x7'	2832.95
TX-472MDP*	72 ft.	22' 8"	4	1210	12 1/2"	21 1/2"	4'x4'x7'	3899.95
TX-489	89 ft.	23' 4"	5	1590	12 1/2"	25 1/2"	4'x4'x7'	4927.95
TX-489MDPL*	89 ft.	23' 4"	5	1800	12 1/2"	25 1/2"	4'x4'x8 1/2'	7390.95

*TX-472MDP includes heavy duty motor drive with positive pull down. *TX-489MDPL comes with heavy duty motor drive with dual level wind and positive pull down. MDPL models include fully operational limit switch packages.

FREE STANDING HEAVY-DUTY CRANK-UP TOWERS

Will handle 30 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
HDX-538	38 ft.	21' 6"	2	600	15"	18"	3'x3'x6'	\$1477.95
HDX-555	55 ft.	22'	3	870	15"	21 1/2"	4'x4'x6'	2099.95
HDX-572	72 ft.	22' 8"	4	1420	15"	25 1/2"	4'x4'x7'	4434.95
HDX-572MDPL*	72 ft.	22' 8"	4	1600	15"	25 1/2"	4'x4'x8 1/2'	6775.95
HDX-589MDPL*	89 ft.	23' 8"	5	2440	15"	30 1/2"	5'x5'x8 1/2'	8869.95
HDX-689MDPL*	89 ft.	23' 8"	5	3450	18"	37 1/8"	5'x5'x9 1/2'	17,135.95
HDX-5106MDPL*	106 ft.	24' 8"	6	3700	15"	37 1/2"	5'x5'x9 1/2'	18,647.95

*Includes heavy-duty motor drives with dual level wind and positive pull down. MDPL models include fully operational limit switch packages. *HDX-689MDPL rated 60 sq. ft. of antenna at 50 mph winds. HDX-5106MDPL rated at 35 sq. ft. of antenna at 50 mph winds

FREE STANDING "LOW-PROFILE" COMPACT CRANK-UP TOWERS

The SS will handle 18 sq. ft. and HD, 24 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top	SECTION OD Bot.	BASE SIZE	AES PRICE
TMM-433SS*	33 ft.	11' 4"	4	315	10"	18"	3'x3'x4'	\$1219.95
TMM-433HD	33 ft.	11' 4"	4	400	12 1/2"	20 1/2"	3'x3'x5'	1477.95
TMM-541SS	41 ft.	12'	5	430	10"	20 1/2"	3'x3'x4 1/2"	1599.95

* Rotators must be top mounted on SS models. Yaesu G800SDX will fit in and nest.

*** Any tower purchased with a MDP-750 or MDPL-1000 motor drive MUST be purchased with either the MCL-100 or the RMC-1000.

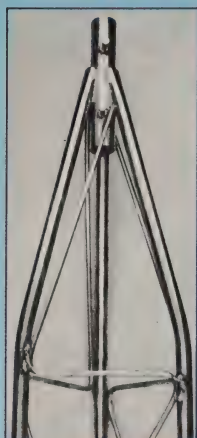
WRITE OR CALL FOR A COMPLETE US TOWER CATALOG - FREE!

SEE
PRICE LIST
FOR
COMPLETE
LIST OF
ACCESSORIES

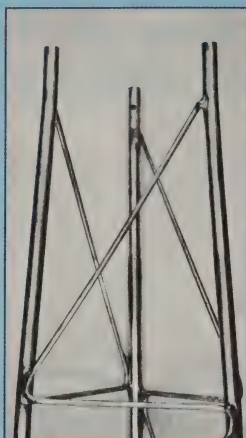


Tilt-over
Base

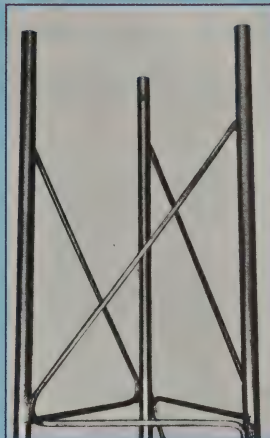
UNIVERSAL TOWERS



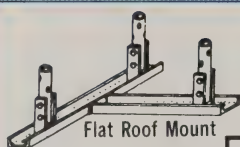
TOP SECTION



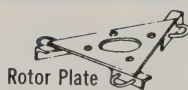
TAPER SECTION



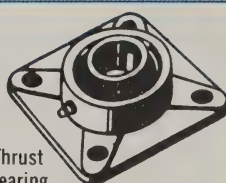
STRAIGHT SECTION



Flat Roof Mount



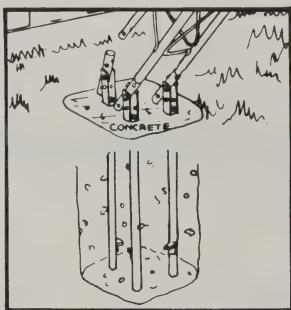
Rotor Plate



Thrust Bearing



Base Legs

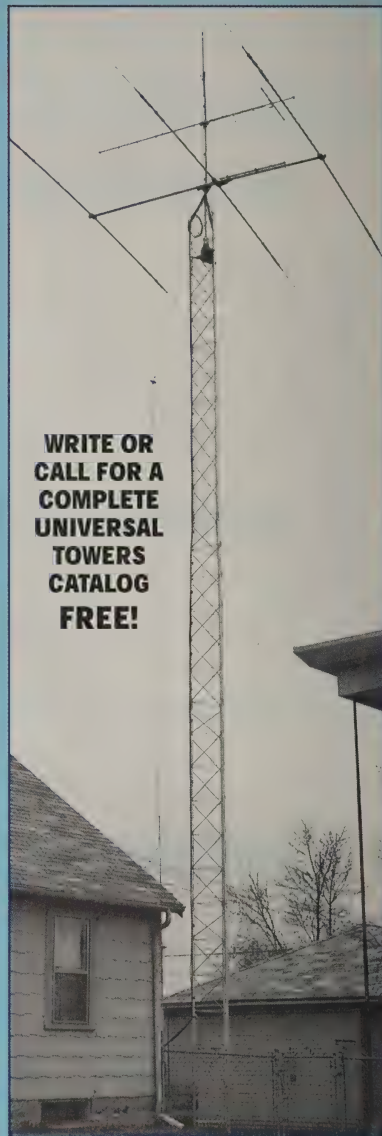


Base Legs installed in concrete showing Hinge-Over feature.

Top Section with Thrust Bearing Plate



**WRITE OR
CALL FOR A
COMPLETE
UNIVERSAL
TOWERS
CATALOG
FREE!**



50 ft. UNIVERSAL Self-Supporting Aluminum Tower installed at the QTH of Ted Willett W9NHE. This set up made a Big difference — he really gets out!

SECTIONAL DESIGNATIONS

Universal Aluminum Tower Sections are 10 ft. in length and are an equilateral triangular welded truss. They are designated as 11", 14", 18", 22", 26" & 30".

CHOOSING THE PROPER TOWER

Determine the projected area of the antenna that you intend to mount. This figure is often in the literature that comes with the antenna. Standard T.V. antennas are about 2 square feet in area; 6 & 10 meter beams and large T.V. antennas utilize 5 sq. ft. models; 20 & 40 meter beams utilize 9 sq. ft. models; large 20 & 40 meter beams or multiple antenna arrays utilize 18, 22, 26 sq. ft. models. Also take into consideration when using a rotator to add 1 sq. ft. plus 1 sq. ft. for the mast to whatever size antenna you intend to use.

Decide on the tower height that you want. Universal towers are made in 10 foot sections to give you many possible sizes and the ability to add sections later.

Choose the tower model that is recommended for you. The model number is merely the wind loading followed by the height size. For example, if your antenna calculation resulted in a tower designed for five sq. ft. and you wish it to be 50 ft. high, the model you want is 5-50. See Price List for Configurations & Prices.

BEFORE BUYING A TOWER

Consider the advantages of —

ALUMINUM

(It's Strong, Lightweight, Rust Free and easy to assemble and erect.)

UNIVERSAL offers 10 ft. sections or complete towers ranging from 30 to 100 ft. with a choice of wind load ratings and accessories to meet your specific needs.

MILWAUKEE STORE – RANDOM SHOTS



COUNTER & PHONE SALES TEAM



YAESU SECTION – Tom, N9UJJ



ICOM SECTION – Gary, KA9YTB



KENWOOD SECTION – Paul, N9SO & Gary KA9YTB



SHORTWAVE SECTION – Jared, KB9LTV



SCANNERS SECTION – Steve, N9SO



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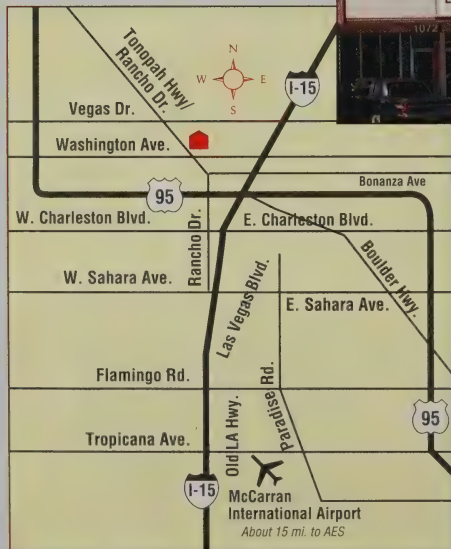
414-358-0333 • 1-800-558-0411



Wickliffe, Ohio

28940 Euclid Avenue

440-585-7388 • 1-800-321-3594

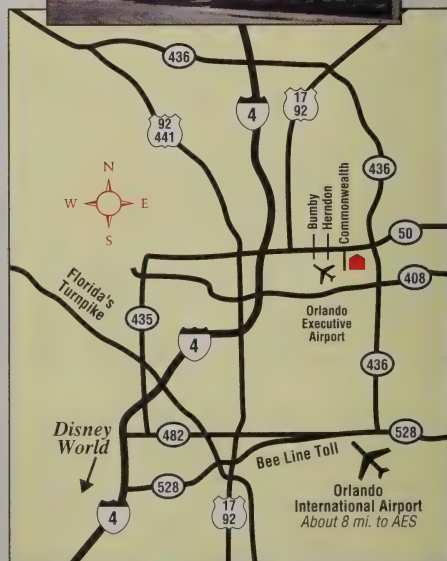


Las Vegas, Nevada

1072 N. Rancho Dr.

702-647-3114

1-800-634-6227



Orlando, Florida

621 Commonwealth Avenue

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Luis WP4JSR
wp4jsr@hotmail.com

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export@aesham.com

www.aesham.com

ABREVIACIONES IMPORTANTES

AMP	Amplificador
ANT	Antena
AT	Acoplador automatico de antena
BATT	Bateria
BKT	Braket de montura
BPR	Guarda choque
CGR	Cargador
CIG	Conector cigarillo
CNTR	Contador
DB	Decibeles
DLX	Lujo
DPLX	Duplexador
EL	Elemento
FREQ	Frecuencia
GRD	Tierra
GTR	Labio de ventana
HT	Radio de mano
HVY	Pesado
KYR	Llave
MA	Milamperes
MAG	Magnetico
MAINT	Mantenimiento
MIC	Microfono
MT	Montura
MTG	Montura
NMO	Montura Motorola
PROG	Programable
PS	Fuente de poder
PWR	Poder
RCVR	Receptor
REM	Remoto
SENS	Sensitividad
SPKR	Bocina
SPLX	Simplex
SYS	Sistema
TTP	Teclado de botones
VOL	Volumen
W/	Con
WPM	Palabras por minuto
XCVR	Transceptor

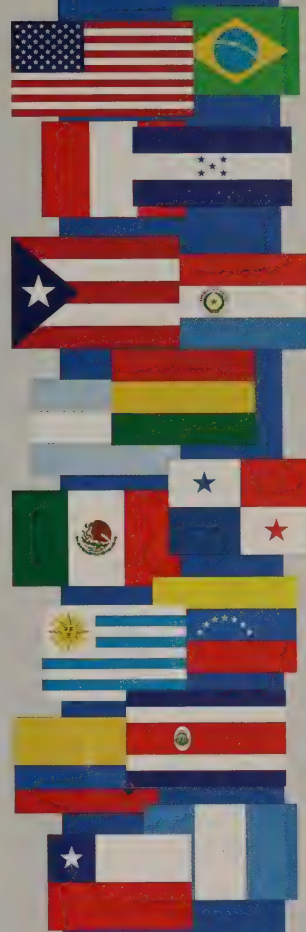
Para Contactar:

AMATEUR ELECTRONIC SUPPLY® • 621 Commonwealth Avenue, Orlando, Florida 32803, EUA Tel. 1-407-894-3238; Toll Free: 1-800-327-1917; Fax: 1-407-894-7553; Internacionales: 1-407-898-1166

Forma de pago: El pago que se prefiere es por transferencia de fondos. No se aceptan giros bancarios internacionales. Las tarjetas internacionales de crédito se aceptan únicamente en nuestros salones de venta. Nuestra dirección para la transferencia de fondos es: Barnett Bank of Orlando, Fashion Square Branch, Orlando, Florida. Routing #063103193, para crédito a Amateur Electronic Supply – Acct. #2836088068.

Método de envío: El envío se hará de acuerdo con sus instrucciones. Si UD. no las indica AES hallará el método más adecuado.

Garantía: La fábrica garantiza sus equipos únicamente dentro de los Estados Unidos. Si su equipo necesitara reparación debe devolverlo a AES con una copia de la garantía y de la factura dentro del plazo autorizado por el fabricante. AES se reserva el derecho de reparar o substituir el equipo que no funcione como diseñado por razones que no resultaron por daño durante el envío. Al recibir el equipo que no funcione o por defectos debe notificarse a AES antes de los 10 días después de recibido. El equipo debe empacarse en la caja original usando los materiales de empaque originales. **El costo del envío, tanto de ida como de vuelta, es por cuenta del cliente.** Los precios y garantías pueden cambiarse sin previo aviso. Algunos productos no pueden ser exportados a ciertos países de acuerdo con las legislaciones locales.



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DICK KE9QU



GARY L. KA9YTB



GARY S. W9NR



JARED KB9LTV



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JIM WB9LSR



MIKE N9LBQ
STORE MANAGER



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PAUL W. WA9TFG



RAY K9KHW



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ERNIE K1HO



GRANT K4IQW
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LUIS WP4JSR
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LUKE KK7BW



MEL N6SJK



SQUEAK AD7K
STORE MANAGER



TERRY



TOM N7GBJ

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AES[®] SERVICE TEAM

WE'RE A FULL SERVICE DEALER

Unlike some Dealers, when you purchase a New Radio from us, our Service Department is able to provide you with Outstanding Technical Service and assistance.

If you have a problem, we are determined to keep you on the air! To do this, we offer Priority Warranty Service on ALL New Radios that we sell. You can be assured that if your New Radio fails within 10 days after receiving it, it will be repaired promptly, or we'll replace it! If a failure occurs after the 10 day priority period, it will be repaired under our "Warranty Repairs First" policy, which will get you back on the air with minimum delay.

EXPERIENCE

Our 8 full-time (pictured) and 4 part-time technicians are all Factory-Trained on the major brands (ALINCO, ICOM, KENWOOD, YAESU) and others. They have more than 70 years of cumulative experience in the ham service field and are FCC and NABER certified.

WE'RE EQUIPPED TO DO THE JOB

Each shop uses a state-of-the-art Hewlett Packard 8920A test set, which replaces several pieces of conventional test equipment. We also use H-P's digital scopes and DVM's, and PACE soldering stations for accurate and time-saving work.

REPAIRS

Whether you purchased from us or not, we can extend our Professional Technical Service to your out-of-warranty late model ham gear. This is on a time available basis, and provided that service parts are still available. To make arrangements, call our Service Department in Milwaukee at 414-358-4087. When shipping in equipment, be sure to include the following: (1) a detailed note stating the problem(s) (2) your address, day time phone number and e-mail address (3) a copy of the invoice, if item is in warranty (4) your method of payment (see Policies Page for list of options) (5) Mark the label "ATTN: Service".

LABOR RATES

Our rate for Out-of-Warranty Service is \$54.00 per hour. Note: There is a \$72.00 minimum charge for service on HF/VHF Base Stations, and a \$54.00 minimum charge on VHF Mobiles and Handheld transceivers.

CALL 414-358-4087 for SERVICE



JOHN, WA8PKB • Wickliffe



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World's Largest Ham Radio Inventory... including accessories

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**FLAT RATE SHIPPING via UPS
GROUND in the Lower 48 States**

AMOUNT OF ORDER

SHIPPING CHARGES

Up to \$100.00	\$4.95
\$100.01 to \$500.00	\$9.95
\$500.01 to \$1,499.99	\$14.95
\$1500.00 & UP	PREPAID

Flat Rate Does Not Apply To Drop Shipments

Flat Rate Advantage - No Penalty for Number of Cartons or Weight!

EXCEPTIONS TO RATES ABOVE

Other UPS methods (Red, Blue & Orange) and any USPS methods are charged at Regular Rates without any credit for UPS ground rates. CODs are not accepted for these faster methods.

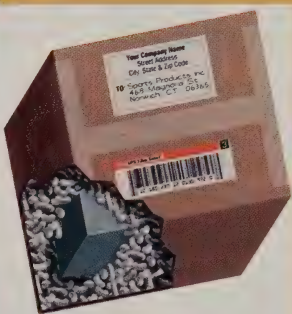
Shipments to APO/FPO & Puerto Rico are via Priority Mail. Orders exceeding UPS or USPS weight, size or value limits will be shipped via Truck or Air Freight collect. Shipping charges taxable in WI, FL & NV.

Please see **Policies Page** for complete information.

NOTE: Tracking numbers for out-bound shipments are gladly given. Call our local number, **414-358-0333**, and ask for tracking number service.

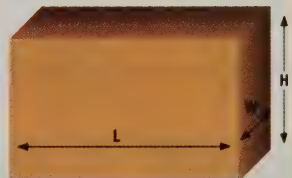
- Huge Inventory of Major items and all related Accessories
- Knowledgeable Salespersons ■ Outstanding Mail Order Service ■ Toll Free Lines at all locations ■ BBS, E-mail & Web Site ■ Service Department ■ Major Credit Cards
- Gift Certificates ■ More!

Importance of Proper Packing



Packing

When returning heavy, delicate, and expensive equipment, it must be carefully packed in order to avoid damage caused by normal transportation dynamics. In other words, if you put your FT-1000, TS-850 or IC-751 in a box with little or no packing beneath it, chances are it will sustain some damage. When contents of packages are damaged, claims will be paid only if the carton and packing meet standards set in the International Safe Transit Association Procedure 1 and 1-A. These standards simply state that cartons and packing should provide reasonable protection to their contents. Ideally, contents should be suspended in the center of the carton by the packing material, no less than three inches on all sides for heavy items. For items heavier than 20 pounds, three inches of foam or crumpled paper should be used instead of polystyrene edge protectors.



Include Information

When you send your well-packed parcel to AES for repair, return or trade-in, be sure to include a letter inside the package. Do not reply on information written or taped on the outside of the carton. This information can be destroyed by moisture or abrasion. In the letter, put your call, name, address, phone and reason for return. You may also want to include your e-mail address and times you can be reached.

$$\frac{L \times W \times H}{194} = \text{Dimensional Weight}$$

Dim Weight

When calculating the cost of air shipments, whether Fed-Ex, UPS or other carrier, remember that they use dimensional weight. Dim weights are used to insure adequate revenues per cubic foot of cargo plane space. The formula used to calculate dimensional weight is: $L \times W \times H$ divided by 194. This means a 12" x 13" x 16" box that weighs six pounds will be sent at the twelve pound rate when an air service is used.

ORDER BLANK

AMATEUR ELECTRONIC SUPPLY® 5710 W. Good Hope Road • Milwaukee, WI 53223

Local: (414) 358-0333 • Toll Free: 1-800-558-0411 • 24-hour FAX: (414) 358-3337 Internet: www.aesham.com • E-Mail: help@aesham.com

Salesperson's Name _____	SHIP TO (If other than at left): _____ _____ _____ _____
Account No. _____ Date _____	
Name _____ Call _____	
Address _____	
City/State _____ Zip _____	
E-Mail Address: _____ Fax: _____	IF YOU HAVE MOVED since your last order, please show your old address: _____ _____ _____
Phone No. (Home) () _____ Hours: _____	
Phone No. (Work) () _____ Hours: _____	

[illegible]

TOTAL AMOUNT OF ORDER

9

LINE 1 — TRADE-IN Allowance (if any) *Enclose mail quotation or reference telephone quote & list Trade-in items on line provided below.*

IMPORTANT! Persons having a Trade-in must check one of the following: (Also, see more important information on previous page and on Policies page.)

- ☐ Hold this order until you receive and approve my trade-in.
- ☐ Payment in-full enclosed. Refund allowance when my trade-in is received and approved.
- ☐ Charge the FULL AMOUNT of my order to my Charge Card and Credit my trade-in allowance when my trade-in is received and approved.

LINE 2 — Shipping Charges We ship via UPS Ground at *flat-rate* shown on previous page, except to APO/FPO made via Priority Mail.

For Faster Service select one of the following: (These methods are not flat-rated so allow for increased shipping charges - no flat-rate credit.)

- ☐
- UPS Next Day Air (Red)
- ☐
- 2nd Day Air (Blue)
- ☐
- 3-Day Select (Orange)
- ☐
- Federal Express
- ☐
- RPS
- ☐
- Express Mail
- ☐
- Priority Mail

LINE 3 — Sales Tax: ☐ WI- 5.6%, ☐ FL- 6%, ☐ NV- 7%, ☐ OH-5.75% *For Ohio & Nevada figure tax from LINE 1 (before trade-in allowance)*

LINE 4 — Credits: AES Refund Checks, Gift Certificates or Manufacturer's Coupons (if any)

CREDIT CARD INFORMATION

**We accept I.M.P.A.C.®
Government Credit Cards**

[illegible]**Cardholder's Name****CARD EXPIRES**

Cardholder's Signature

Date _____

LINE 5 — Balance

LINE 6 — Due AES from previous order (if any)

TOTAL AMOUNT DUE

Choose payment method from below: (Fill in information at right, if applicable)

- ☐
- Bank transfer
- ☐
- Certified check
- ☐
- Personal check
- ☐
- Money order

DO NOT MAIL CURRENCY. Send bank check or money order. Personal check may delay shipping until it clears our bank. Attach remittance to top of order blank.

- ☐ Credit card (VISA, MasterCard, Discover, American Express, IMPAC)
☐ COD \$6.50 fee per package. *Money Order or Certified Check Only.*

MINIMUM \$20.00 COD ORDER - NO AIR OR PARCEL POST COD'S

AMOUNT ENCLOSED

10

BALANCE DUE (IF ANY)

9

BANK
TRANSFER
INFO.

MILWAUKEE, WI

M&I Marshall & Ilsley Bank, Milwaukee,
WI. ABA #075000051. Further credit to
M&I Northern Bank, credit account
#8837510 in the name of Amateur
Electronic Supply.

WICKLIFFE, OH

Key Bank, Wickliffe Branch,
29310 Euclid Avenue; Wickliffe, OH
44092. Routing #041001039 for
credit to: Amateur Electronic
Supply Account #350341000239

ORLANDO, FL

Barnett Bank of Orlando, Fashion
Square Branch, Orlando, FL Routing
#063103193 for credit to: Amateur
Electronic Supply Account
#2836088068

LAS VEGAS, NV

Bank of America, Decatur
Meadows Branch. Routing
#122400724 for Credit to:
Amateur Electronic Supply
Account #260191226

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- Testing On Saturday
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- Free Parking
- RV Overnight Parking With Electric & Water
- Fox Hunt
- Guest Friendly Central Florida Atmosphere
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- Great Food On Premises
- Courtesy Talk-In On 146.76 (Backup Talk-In On 145.11)

The latest gear. Great swap table bargains. Fascinating forums. The largest tail-gating area in Florida. Eye-ball QSO's. Mobile rigs. Call letter hats. Free parking. QRP. Amps. Wire. QSL cards. Computers. Food. Antennas. Fun. Sun. And if that's not enough, Orlando has the best theme parks on earth to round out your visit. It's ham heaven. Make your plans now for the 1999 Orlando HamCation. A great vacation for hams.

Advanced tickets: **\$7.00**
Tickets at the gate: **\$9.00**

Three day swap tables: \$45.

Two day (Sat. & Sun.) tailgating with advanced reservations: \$25. At the door: \$30

For current information, please visit our web site:
HTTP://www.oarc.org/hamcat.html

or write: **HamCation**
P.O. Box 547811
Orlando, FL 32854-7811

Commercial Exhibits	Tim Starr AE4NJ	407 850-9258
Swap Tables	Ron Ruebush KE4WBI	407 847-0650
RV Reservations	Bob Cumming W2BZY	407 333-0690
General Chairman	Ken Christenson KD4JQR	407 291-2465
Tailgating	Jim Hayes KD4OLF	407 249-0178
e-mail:	ae4nj@aol.com	

The Orlando HamCation is a registered service mark of the Orlando Amateur Radio Club.



COD ORDERS Minimum COD order is \$20.00, shipment via UPS Ground only (no air or parcel post). The flat-rate, plus a \$6.50 COD fee per package applies. Payment by money order or certified check, only.

Canadians Note: Returned equipment not originally manufactured in the U.S. will be subject to valuation and custom charges, plus broker's fees. Check customs before shipping anything to us, including new equipment for warranty repair. We will not accept any shipments from outside of the U.S. unless all fees are paid in advance.

DAMAGED ITEMS If the customer discovers a damaged shipment, the carrier should be notified immediately. The merchandise should not be returned to us until notified to do so by the carrier. All packaging materials must be retained including styrofoam peanuts, inner and outer cartons, labeling, etc. for inspection by the carrier or the claim may be denied. With shipments properly packaged (as all our shipments are), the ultimate responsibility for delivery in good condition rests with the carrier.

DEFECTIVE ITEMS Defective items should be returned to Amateur Electronic Supply or the manufacturer for warranty repair or replacement, at our discretion. After processing, we will return it via UPS Ground, prepaid at our expense. If you receive defective equipment, call our Customer Service Department at 414-358-0333 for instructions.

INTERNET ORDERS The customer may order products directly on our web site via our internet order form. If the customer does not have access to the web, but has an e-mail account, the customer may e-mail his/her order making sure the following information is included: full name, call sign (not required to order), phone number, billing address, shipping address, item(s) to be purchased (model number and manufacturer) and method of payment. If paying by credit card, we need the card number and expiration date.

PAYMENT Accepted forms of payment are electronic bank transfer, certified check, personal check, money order, credit card (VISA, MasterCard, Discover, American Express, IMPAC), or COD. The customer's choices of payment methods may depend on amount of purchase or destination of shipment.



We accept U.S. Government I.M.P.A.C.® Credit Cards

PRICING We will pass on decreases in pricing to our customers whenever possible. Due to foreign currency fluctuations, promotions, manufacturers' specials, etc.; prices may vary, so be sure to confirm prices when ordering. All prices and specifications are subject to change without notice. **AMATEUR ELECTRONIC SUPPLY®** is not responsible for typographical errors or omissions.

REFUNDS Amounts under \$5.00 are not refunded unless requested in writing to the Milwaukee headquarters within 12 months.

RETURNS In order to maintain the lowest possible prices, we do not offer a free trial or evaluation period on new equipment. If permitted, an Authorized return of merchandise for credit (it must be like new with

all original packaging) will be subject to a **Minimum 15% Restocking Fee**. The item must be returned within **10 days** after receipt, prepaid, with a copy of the purchase invoice and a letter describing the reason for the return. No returns on antennas, towers, cable, items dropped-shipped from the manufacturer, audio or video tapes, kits, books, or computer software.

SHIPPING Shipping charges, which include adequate insurance, are based on the Order Total at the time of the initial shipment (COD fees not included). The order amount on which charges are determined is pre-coupon and pre-tax. Cancellations on partially shipped orders will not affect the shipping charges. All back-orders are shipped PREPAID at the expense of AES® via UPS Ground Service, only.

Shipping calculations on UPS Ground service to the contiguous 48 states have been simplified by utilizing flat-rate categories. Other UPS methods (Red, Blue & Orange) and any USPS methods are charged at regular rates without any credit for UPS ground rates. CODs are not accepted for these faster methods.

Shipments to APO/FPO are via Priority Mail. Orders exceeding UPS or USPS weight, size or value limits will be shipped via Truck or Air Freight collect. Shipping charges taxable in WI, FL & NV.

TRACKING NUMBERS Tracking numbers for out-bound shipments are gladly given. Call our local number, 414-358-0333, and ask for tracking number service.

TRADE-INS Amateur Electronic Supply® accepts trade-ins on new equipment purchases, the worth of which is determined by the electrical and physical condition of the item. Estimates are given assuming the trade-in is in good electrical and physical condition. If it is not, a deduction will be made.

To facilitate a trade-in, the customer can choose one of the following: (A) Purchase the new item(s), send in the trade for evaluation, and have the trade-in amount refunded or credited. (B) Send in the trade and have the order held until the trade-in amount is determined.

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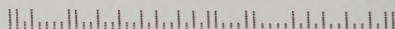
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